

BEACH IMPROVEMENTS

MILWAUKEE COUNTY - SOUTH SHORE PARK

2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

Milwaukee County Dept. of Administrative Services

FACILITIES MANAGEMENT DIVISION

Architectural, Engineering & Environmental Services

633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203



Project #: **P560-17630**

Site #: **639**

Building #: ----

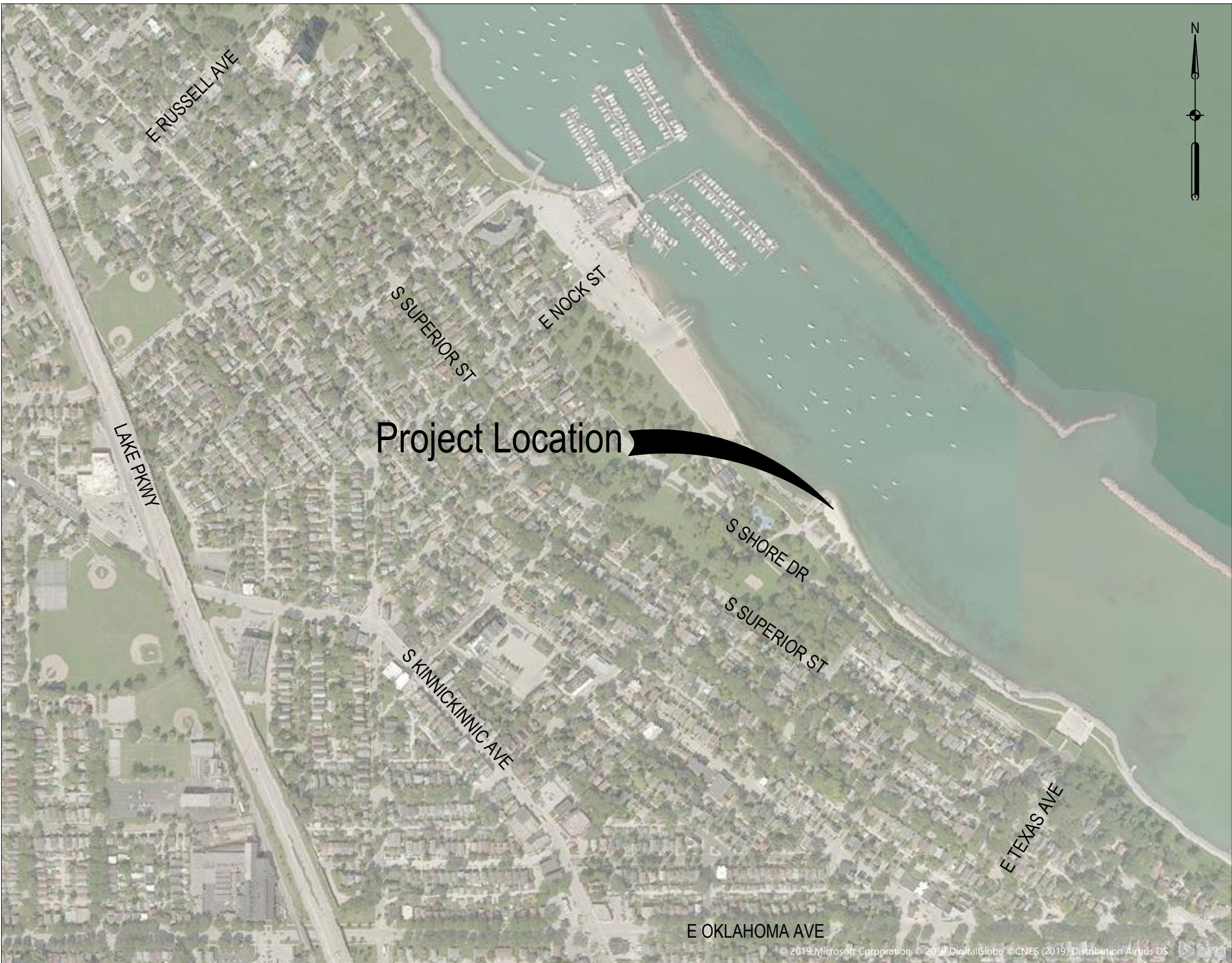
Date: **12/13/2019**

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PROJECT LOCATION MAP

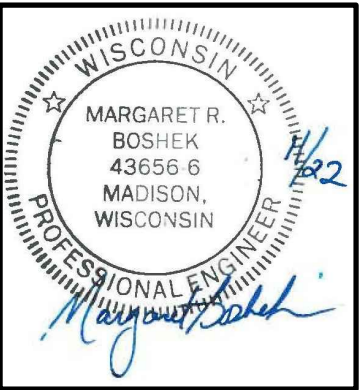
- NOTES:
1. CONTRACTOR SHALL CALL DIGGERS HOTLINE (800) 242-8511 FOR UTILITIES LOCATION 3 DAYS PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL CONTACT MILWAUKEE COUNTY PARKS MAINTENANCE FOR LOCATING ALL UTILITIES ON SITE, WITH MINIMUM 5 DAYS NOTICE: (414) 258-2322.
3. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND COORDINATE/SCHEDULE WITH MILWAUKEE COUNTY AND ALL OTHER NECESSARY GOVERNMENT ENTITIES.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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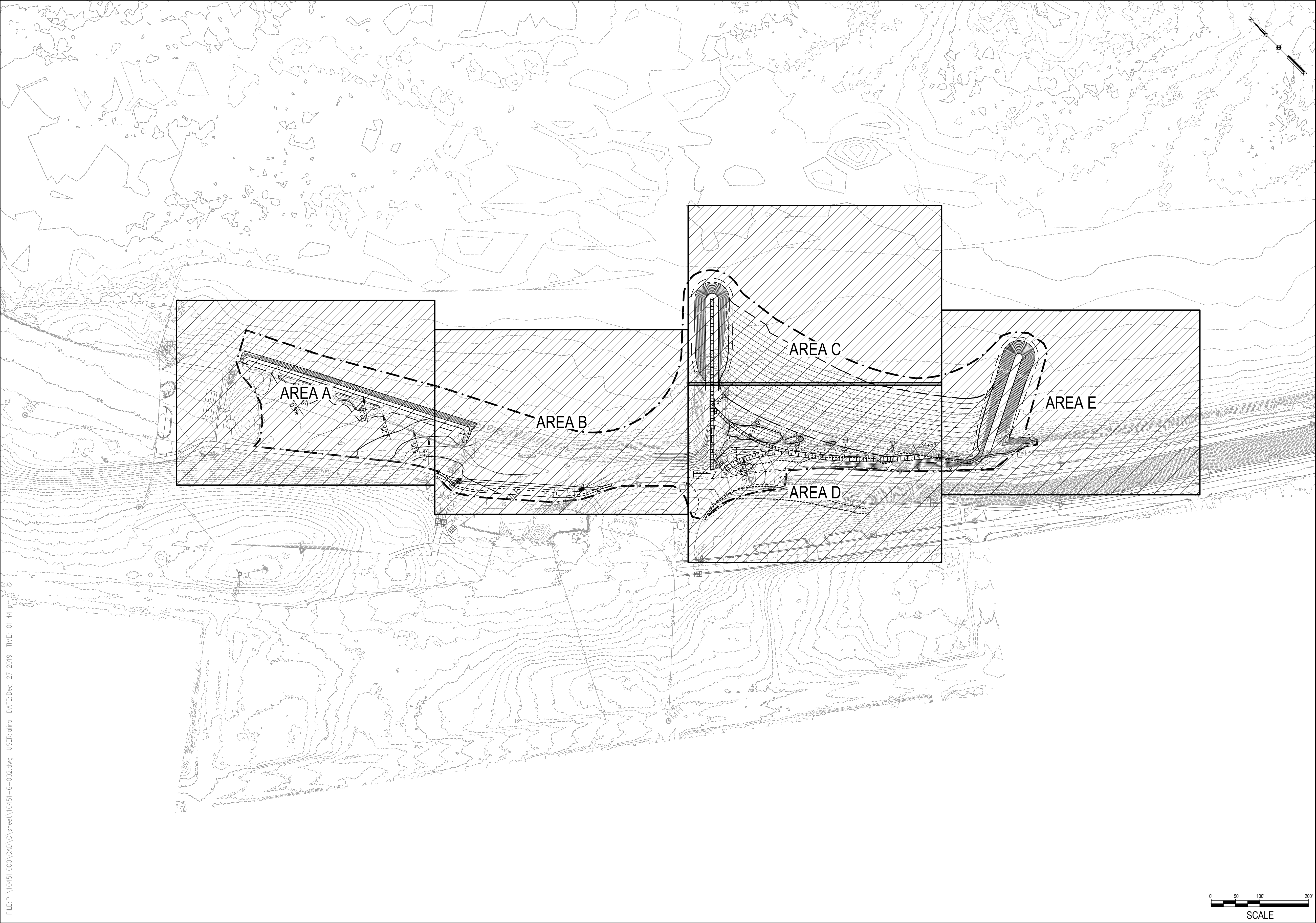
SMITHGROUP

DIRECTOR, (OWNER DEPT.): _____NAME OF DIRECTOR - MILWAUKEE CO. DEPT.

DIRECTOR, AE&ES SECTION, DAS - FM : _____GREG HIGH

DAS - AE&ES UNIT HEAD : _____(WILLIAM BANACH/ STEVAN KEITH/ KARL STAVE/ JAMES ZSEBE)

DAS - AE&ES PROJECT MANAGER : _____NAME OF PROJECT MANAGER



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SEALS AND SIGNATURES

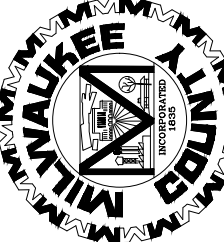
NOT FOR CONSTRUCTION

SMITHGROUP

44 EAST MIFFLIN STREET
SUITE 500
MADISON, WI 53703
608.251.1177
www.smithgroup.com

OVERALL KEY PLAN

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207



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ABBREVIATIONS			
A		GAS	NATURAL GAS
ABD	ABANDONED	G/C:	GUTTER OF CURB (FLOWLINE)
ABS	ACRYLONITRILE BUTADIENE STYRENE	GVL	GRAVEL
AC	ACRES	H	
ADA	AMERICANS WITH DISABILITIES ACT	H	HIGH
ANLA	AMERICAN NURSERY AND LANDSCAPE ASSOCIATION	HB	HOSE BIBB
ARCH	ARCHITECT(URAL)	HCAP	ADA HANDICAP
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	HDPE	HIGH-DENSITY POLYETHYLENE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	HMA	HOT MIX ASPHALT
B		HORZ	HORIZONTAL
B.M.	BENCHMARK	HP	HIGH POINT
BIT	BITUMINOUS	HT	HEIGHT
BLDG	BUILDING	I	
B/F	BOTTOM OF FOOTING	I.D.	INNER DIAMETER
B/S	BOTTOM OF SWALE	IN	INCH, INCHES
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	INCL	INCLUDE, INCLUDING
BVCS	BEGINNING OF VERTICAL CURVE STATION	INV:	PIPE INVERT ELEVATION
B/W	BOTTOM OF WALL (FINISH GRADE)	IRR	IRRIGATION
C		K	
CB	CATCH BASIN	K	K VALUE
CI	CURB INLET	J	
CIP	CAST IRON PIPE	JT	JOINT
CL	CLASS	L	
CMP	CORRUGATED METAL PIPE	L	LENGTH
CON	CONDENSATE	LF	LINEAR FEET
CO	CLEANOUT	LPT	LOW POINT
CONC	CONCRETE	LN	LANE
CU FT	CUBIC FOOT	LVC	LENGTH OF VERTICAL CURVE
CURV	CURVATURE	M	
CU YD	CUBIC YARD	MATL	MATERIAL
CWR	CHILLED WATER RETURN	MAX	MAXIMUM
CWS	CHILLED WATER SUPPLY	M.E.	MATCH EXISTING
D		MH	MANHOLE
DEMO	DEMOLISH	MIN	MINIMUM
DEPT	DEPARTMENT	MISC	MISCELLANEOUS
DIA	DIAMETER	N	
DIP	DUCTILE IRON PIPE	N	NORTH, NORTHING COORDINATE
DWG	DRAWING	NA	NOT APPLICABLE
E		NIC	NOT IN CONTRACT
E	EAST, EASTING COORDINATE	N.T.S.	NOT TO SCALE
EA	EACH	O	
EG	EXISTING GRADE	O.C.	ON CENTER
ELEV	ELEVATION	O.D.	OUTER DIAMETER
E/P	EDGE OF PAVEMENT (EDGE OF METAL)	OFF	OFFSET
EQ	EQUAL	OPT	OPTIONAL
ESVCP	EXTRA STRENGTH VITRIFIED CLAY PIPE	P	
EVCE	END OF VERTICAL CURVE ELEVATION	PC	POINT OF CURVATURE (POC)
EVCS	END OF VERTICAL CURVE STATION	PED	PEDESTRIAN
EX	EXISTING	PERF	PERFORATED
F		PERP	PERPENDICULAR
FF:	FINISH FLOOR ELEVATION	PLMB	PLUMBING
FG	FINISH GRADE	PREP	PREPARATION
FHWA	FEDERAL HIGHWAY ADMINISTRATION	PROP	PROPOSED
FM	FORCE MAIN	PSF	POUNDS PER SQUARE FOOT
FT	FOOT, FEET	PSI	POUNDS PER SQUARE INCH
FURN	FURNISHING	PT	POINT, POINT OF TANGENCY (POT)
G		PVC	POINT OF VERTICAL CURVATURE, POLYVINYL CHLORIDE
GALV	GALVANIZED	PVI	POINT OF VERTICAL INTERSECTION
		PVMT	PAVEMENT
		PWR	POWER
		Q	
		QTY	QUANTITY
		R	
		RAD	RADIUS
		RCP	REINFORCED CONCRETE PIPE
		RD	ROAD
		REF	REFERENCE
		REINF	REINFORCED, REINFORCEMENT
		REM	REMOVE
		REQD	REQUIRED
		RIM:	RIM ELEVATION
		ROW	RIGHT OF WAY
		S	
		S	SOUTH
		SAN	SANITARY SEWER
		SCH	SCHEDULE
		SESC	SOIL EROSION AND SEDIMENTATION CONTROL
		SP	SPACE, SPACED, SPACING
		SQ FT	SQUARE FEET
		SQ YD	SQUARE YARD
		ST	STREET
		STA	STATION
		STAG	STAGGER, STAGGERED
		STD	STANDARD
		STL	STEEL
		SSL	STAINLESS STEEL
		STM	STORM SEWER
		SWPPP	STORMWATER POLLUTION PREVENTION PLAN
		T	
		T	TELECOM
		T/C	TOP OF CURB
		TEMP	TEMPORARY
		T/F	TOP OF FOOTING
		T/S	TOP OF SWALE
		T/W	TOP OF WALL
		TYP.	TYPICAL
		U	
		UD	UNDERDRAIN
		UTIL	UTILITY
		V	
		V/B:	VALVE BOX
		VERT	VERTICAL
		W	
		W	WEST
		WM	WATER MAIN
		W/O	WITHOUT
		WWF	WELDED WIRE FABRIC
		Y	
		YD	YARD DRAIN
		SYMBOL	
		Ø	DIAMETER
		±	PLUS/MINUS
		Δ	DELTA

REFERENCE SYMBOLS

SITE SECTION

KEYED NOTE MARK

PLAN DETAIL REFERENCE

REVISION NUMBER AND EXTENT

PLANT MATERIAL LABEL

MATCHLINE REFERENCE

DRAWING TITLE SYMBOLS

NORTH ARROW

EROSION CONTROL NOTES

- POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
- KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
- CONTRACTOR IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
- INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
- WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
- REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
- INSTALL PERIMETER EROSION CONTROLS AND STABILIZED CONSTRUCTION ENTRANCES AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR STABILIZED CONSTRUCTION ENTRANCES.
- INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
- STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
- NOTIFY ENGINEER IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION, OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATER ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
- PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING RATES TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE WITH THE CORRECTLY FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061.
- COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP #1063.
- CONSTRUCT AND PROTECT THE BIOINFILTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1004.
- INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
- REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
- INSTALL AND MAINTAIN SEDIMENT CONTROL TUBES IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS #1071.
- IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
- IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
- STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
- SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY ENGINEER. SEPARATE SWEEP MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
- CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES #1068.
- PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
- COORDINATE WITH ENGINEER TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, SEDIMENT CONTROL TUBES, OR COMPACTED EARTHEN BERMS).
- FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS I TYPE A EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
- FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED AREAS, PROVIDE CLASS II TYPE B EROSION CONTROL MATTING. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
- MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
- INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, SEDIMENT CONTROL TUBES, WATTLES, SWALES, ETC.), OR AS DIRECTED BY ENGINEER.

GENERAL NOTES

- PRIOR TO START OF PROJECT WORK, VERIFY ALL SITE CONDITIONS AND SUBMIT A PROJECT WORK PLAN TO THE ENGINEER FOR REVIEW AND COMMENT. PRESENT THE WORK PLAN AT THE OWNER'S PRE-CONSTRUCTION MEETING. DO NOT BEGIN PRIOR TO THE 'PRE-CONSTRUCTION MEETING' AND WRITTEN AUTHORIZATION TO PROCEED IS ISSUED BY THE OWNER.
- NOTIFY THE ENGINEER IN WRITING OF ANY IDENTIFIED DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS PRIOR TO THE START OF WORK. DURING PERFORMANCE OF THE WORK, VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND CROSS-CHECK DETAILS AND DIMENSION SHOWN ON THE DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS PRIOR TO STARTING WORK. IN ALL CASES WHERE A CONFLICT MAY OCCUR, THE ENGINEER SHALL BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
- PRIOR TO THE COMMENCEMENT OF WORK, VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY CONSTRUCTION AND TAKE RESPONSIBILITY FOR DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF CONSTRUCTION.
- TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION, INCLUDING DAMAGES TO UTILITIES, WALKS, WALLS, DRIVES, CURBS, ETC.
- SECURE ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES WITH UTILITIES ON THE SITE PRIOR TO THE CONSTRUCTION OF THE PROJECT. ADHERE TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS OR REGULATIONS PERTAINING TO THE PROJECT.
- UNDERGROUND UTILITY INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

- VERIFY LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- ESTABLISH AND MAINTAIN SITE SECURITY UNTIL PROJECT ACCEPTANCE.
- USE DIMENSIONS SHOWN ON DRAWINGS FOR LAYOUT OF THE WORK. DO NOT USE SCALE DIMENSIONS FROM PLANS, SECTIONS, OR DETAILS ON THE DRAWINGS.
- REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON DRAWINGS.
- DETAILS NOTED AS TYPICAL SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. WHERE NO SPECIFIC DETAIL IS SHOWN, THE CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.
- TAKE NOTE OF ALL GRADING AND DRAINAGE WAYS AND MAINTAIN THESE DRAINAGE WAYS TO FLOW FREE OF OBSTRUCTIONS.
- COORDINATE CONSTRUCTION OF PENETRATIONS, SLEEVES, VARIATIONS IN THE SLAB ELEVATIONS, DEPRESSED AREAS, AND ALL OTHER ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS.
- DISPOSE ALL ELEMENTS DESIGNATED FOR REMOVAL IN A LEGAL MANNER. PROVIDE RECEIPTS AND LETTERS FROM DISPOSAL SITES TO OWNER AS REQUIRED BY THE OWNER.
- PREPARE ALL SUBGRADES IN ACCORDANCE WITH RECOMMENDATIONS OF GEOTECHNICAL ENGINEER. PROVIDE PROOF OF ALL REQUIRED SOIL COMPACTION TO THE OWNER.
- ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- COORDINATE WORK OF SUBCONTRACTORS AND ALL OTHER CONTRACTORS TO ENSURE ORDERLY AND EFFICIENT COMPLETIONS OF ALL WORK.
- INDEPENDENT OF NUMERIC QUANTITIES ON DRAWINGS OR IN THE PLANT SCHEDULE, DETERMINE THE PLANT MATERIAL QUANTITIES REQUIRED BY THE PLANS. SPACE PLANT MATERIALS AS SHOWN ON PLANS AND INDICATED IN PLANT SCHEDULE. PLANT MATERIALS SHALL CONFORM TO PLANT SCHEDULES AND SIZES SHALL BE THE MINIMUM INDICATED ON THE PLANT SCHEDULE OR LARGER. INSTALLATION OF LARGER PLANTS AT NO ADDITIONAL COST TO OWNER. ALL MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANLA 'STANDARDS FOR NURSERY STOCK'.
- PRIOR TO INSTALLATION, DEMARCAT E LAYOUT OF ALL PLANTING BEDS, SEED AREAS, AND INDIVIDUAL TREES FOR REVIEW AND APPROVAL BY FIELDAPPROVER. INCLUDE PERENNIAL GROUPINGS BY SPECIES FOR INTERNAL BED LAYOUTS. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. THE FIELDAPPROVER WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAY MAKE MINOR ADJUSTMENTS AS NECESSARY. SUCH ADJUSTMENTS WILL BE AT NO ADDITIONAL COST TO THE OWNER.
- SEEDING APPLIES TO ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES EVEN IF ACTIVITIES EXTEND BEYOND THE APPROXIMATED SEEDING LIMITS INDICATED ON THE DRAWINGS. REPAIR ANY DISTURBED AREAS TO THE SAME CONDITION AS ORIGINALLY FOUND AND TO THE OWNER'S SATISFACTION. IN AREAS WHERE LAWN IS DISTURBED BEYOND THE LIMITS OF CONSTRUCTION, REPLACE LAWN WITH NEW LAWN SEED (INCLUDING TOPSOIL, SEED AND MULCH) AT NO ADDITIONAL COST TO THE OWNER. REFER TO SPECIFICATIONS FOR SEED MIXES.
- UTILIZE HORTICULTURAL TREE WATERING BAGS FOR TREES PLANTED OUTSIDE OF IRRIGATED LANDSCAPE ZONES THROUGHOUT WARRANTY PERIOD. REPLENISH TREE WATERING BAGS REGULARLY SO THAT NONE REMAIN WITHOUT WATER FOR MORE THAN 24 HOURS.
- MINIMIZE CULTIVATION WITHIN THE DRIP LINES OF EXISTING TREES. PREPARE SOIL FOR SEEDING BY MINIMIZING DISTURBANCE TO 4-INCH DEPTH. HAND CULTIVATE WHEN ENCOUNTERING ROOTS. NO HEAVY EQUIPMENT ALLOWED WITHIN DRIP LINE OF EXISTING TREES.
- SHOVEL-CUT PLANTING BED EDGES UNLESS LABELED OTHERWISE.
- MULCH PLANTING BEDS PER SPECIFICATIONS. KEEP MULCH 4 INCHES FROM TREE TRUNKS AND SHRUB CROWNS.
- CONTACT "811" UNDERGROUND UTILITIES LOCATION CENTER PRIOR TO INSTALLATION OF PLANT MATERIAL AND IRRIGATION SYSTEM.
- LEGALLY DISPOSE OF DEBRIS ASSOCIATED WITH PLANTING OFF-SITE.
- ALL ABBREVIATIONS, SYMBOLS, AND LEGENDS SHOWN ON THIS DRAWING ARE NOT NECESSARILY USED.
- THE HORIZONTAL DATUM IS ACCORDING TO THE NORTH AMERICAN DATUM OF 1927 (NAD27), STATE PLANE COORDINATES, WISCONSIN SOUTH ZONE.
- THE VERTICAL DATUM IS ACCORDING TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
 - LOW WATER DATUM IS 578.34 FEET NGVD29.
 - MEAN WATER LEVEL IS 579.68 FEET NGVD29.
 - RECORD HIGH WATER ELEVATION IS 583.19 FEET NGVD29.

GRADING SYMBOLS

- 861.50 X PROPOSED SPOT ELEVATION
- LP 861.50 X APPROX. SPOT ELEVATION: MATCH EXISTING GRADE
- 861.50 M.E. X APPROX. SPOT ELEVATION: MATCH EXISTING GRADE & CROSS SLOPE OF ROADWAY
- RIM 861.50 X STRUCTURE RIM ELEVATION
- T/C 861.50 X GUTTER OF CURB ELEVATION
- E/P 861.50 X EDGE OF PAVEMENT ELEVATION
- T/F 861.50 X TOP OF FOOTING ELEVATION
- B/F 861.50 X BOTTOM OF FOOTING ELEVATION
- T/S 861.50 X TOP OF SWALE ELEVATION
- B/S 861.50 X BOTTOM OF SWALE ELEVATION

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

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GENERAL NOTES

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
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Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

C-001



SHEET NOTES

1. UPLAND SURVEY FIELD WORK PERFORMED BY KSINGH ENGINEERS ON NOVEMBER 14, 2017.
2. BATHYMETRY INFORMATION CONSISTS OF A SURVEY FIELD WORK PERFORMED BY KSINGH ENGINEERS ON NOVEMBER, 2019 AND LIDAR 2012 INFORMATION.
3. TURBIDITY BARRIER TO BE INSTALLED AROUND ACTIVE CONSTRUCTION ZONE.
4. CONSTRUCTION FENCE TO BE LOCATED ADJACENT TO PAVEMENT (EAST EDGE OF PATHWAY) ALONG OAK LEAF TRAIL. CONTRACTOR SHALL RELOCATE AS NECESSARY WITH CONSTRUCTION PHASING TO MAINTAIN PUBLIC ACCESS AS MUCH AS POSSIBLE.

LEGEND

	SILT FENCE
	INLET PROTECTION
	SEDIMENT CONTROL TUBE
	STABILIZED CONSTRUCTION ENTRANCE
	TURBIDITY BARRIER
	WETLAND BOUNDARY
	LIMITS OF CONSTRUCTION
	FULL DEPTH PAVEMENT REMOVAL
	SEDIMENT BASIN
	TREE REMOVAL
	CONSTRUCTION FENCE
	PAVEMENT SAWCUT
	PROTECT
	REMOVE
	INLET PROTECTION
	CONSTRUCTION ENTRANCE
	UNDERGROUND SANITARY SEWER
	UNDERGROUND GAS
	UNDERGROUND ELECTRIC
	OVERHEAD
	BUILDING HATCH
	CONCRETE HATCH
	ASPHALT HATCH

SEALS AND SIGNATURES

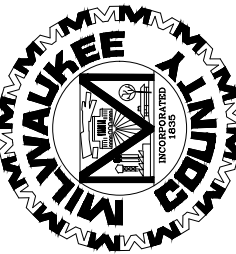
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EXISTING, SITE PREP, EROSION &
SEDIMENT CONTROL - AREA A

BEACH IMPROVEMENTS
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FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:



Know what's below.
Call before you dig.

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0' 10' 20' 40'
SCALE

CE101



SHEET NOTES

1. UPLAND SURVEY FIELD WORK PERFORMED BY KSINGH ENGINEERS ON NOVEMBER 14, 2017.
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LEGEND

	SILT FENCE
	INLET PROTECTION
	SEDIMENT CONTROL TUBE
	STABILIZED CONSTRUCTION ENTRANCE
	TURBIDITY BARRIER
	WETLAND BOUNDARY
	LIMITS OF CONSTRUCTION
	FULL DEPTH PAVEMENT REMOVAL
	SEDIMENT BASIN
	TREE REMOVAL
	CONSTRUCTION FENCE
	PAVEMENT SAWCUT
	PROTECT
	REMOVE
	INLET PROTECTION
	CONSTRUCTION ENTRANCE
	UNDERGROUND SANITARY SEWER
	UNDERGROUND GAS
	UNDERGROUND ELECTRIC
	OVERHEAD
	BUILDING HATCH
	CONCRETE HATCH
	ASPHALT HATCH

SEALS AND SIGNATURES

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EXISTING, SITE PREP, EROSION & SEDIMENT CONTROL - AREA B

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USER: arif
DATE: 12/13/2019

BEACH IMPROVEMENTS

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2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE: 12/13/2019
PROJECT: P560-17630
SITE NO: 639
BUILDING NO: ---

CE102



Know what's below.
Call before you dig.

FILE: F:\10451.000\CAD\C\sheet\10451-CE101.dwg USER: alra DATE: Dec, 27 2019 TIME: 01:45 pm
MATCHLINE - SEE SHEET CE102



OHWM = 582.34 (NGVD29)

MATCHLINE - SEE SHEET CE104



SCALE

SHEET NOTES

1. UPLAND SURVEY FIELD WORK PERFORMED BY KSINGH ENGINEERS ON NOVEMBER 14, 2017.
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LEGEND

- SILT FENCE (3 CE501)
- INLET PROTECTION (2 CE501)
- SEDIMENT CONTROL TUBE (4 CE501)
- STABILIZED CONSTRUCTION ENTRANCE (1 CE501)
- TURBIDITY BARRIER (5 CE501)
- WETLAND BOUNDARY
- LIMITS OF CONSTRUCTION
- FULL DEPTH PAVEMENT REMOVAL
- SEDIMENT BASIN
- TREE REMOVAL
- CONSTRUCTION FENCE
- PAVEMENT SAWCUT
- PROTECT
- REMOVE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- SAN UNDERGROUND SANITARY SEWER
- G UNDERGROUND GAS
- E UNDERGROUND ELECTRIC
- OH OVERHEAD
- BUILDING HATCH
- CONCRETE HATCH
- ASPHALT HATCH

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

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EXISTING, SITE PREP, EROSION &
SEDIMENT CONTROL - AREA C

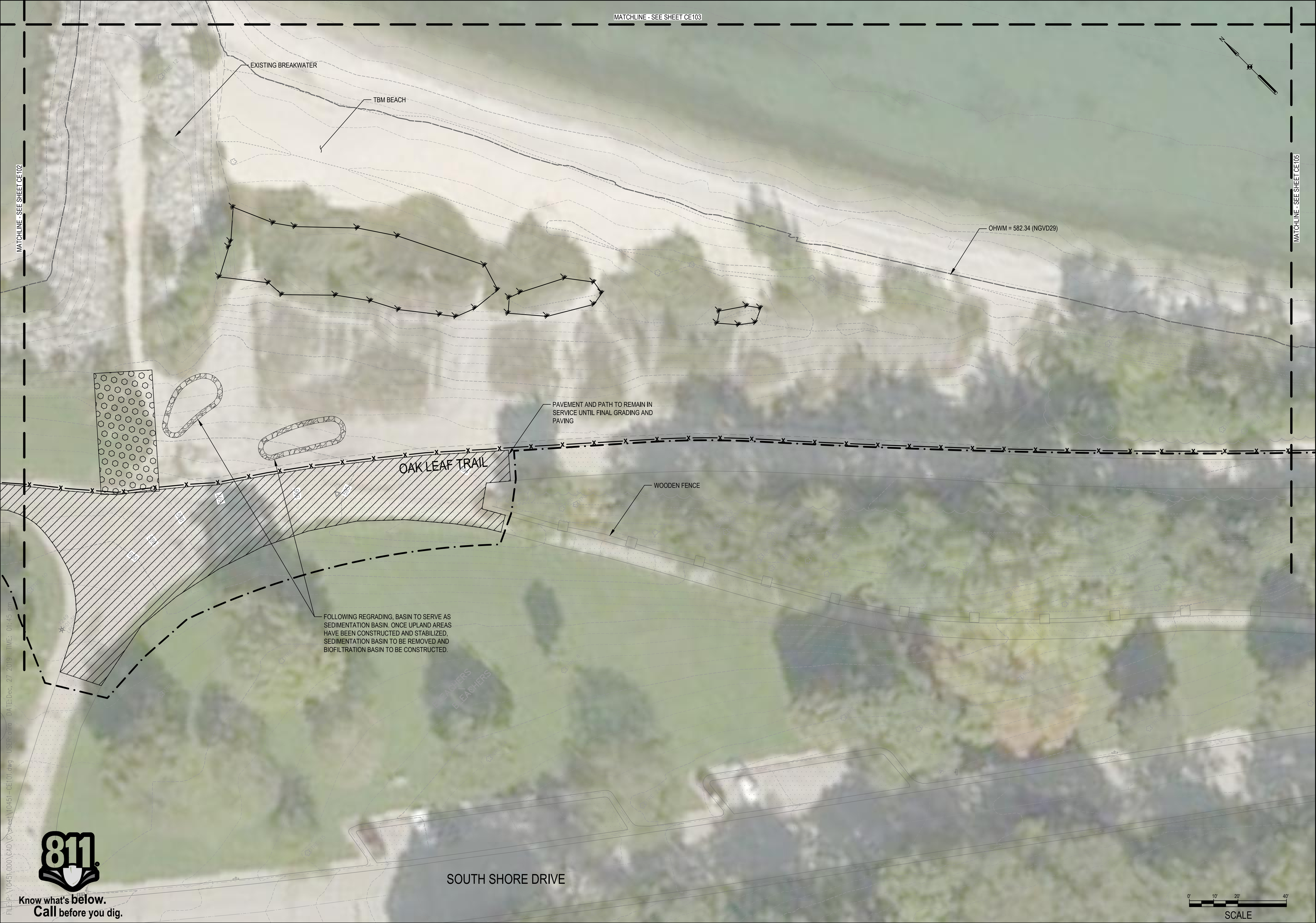
BEACH IMPROVEMENTS
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Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
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DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CE103



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LEGEND

- SILT FENCE (3 CE501)
- INLET PROTECTION (2 CE501)
- SEDIMENT CONTROL TUBE (4 CE501)
- STABILIZED CONSTRUCTION ENTRANCE (1 CE501)
- TURBIDITY BARRIER (5 CE501)
- WETLAND BOUNDARY
- LIMITS OF CONSTRUCTION
- FULL DEPTH PAVEMENT REMOVAL
- SEDIMENT BASIN
- TREE REMOVAL
- CONSTRUCTION FENCE
- PAVEMENT SAWCUT
- PROTECT
- REMOVE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- SAN UNDERGROUND SANITARY SEWER
- G UNDERGROUND GAS
- E UNDERGROUND ELECTRIC
- OH OVERHEAD
- BUILDING HATCH
- CONCRETE HATCH
- ASPHALT HATCH

SEALS AND SIGNATURES

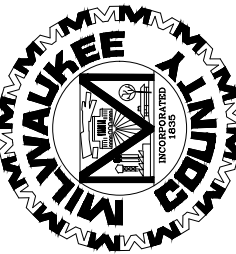
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EXISTING, SITE PREP, EROSION &
SEDIMENT CONTROL - AREA D

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Architectural, Engineering & Environmental Services
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DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CE104



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SHEET NOTES

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LEGEND

- SILT FENCE
- INLET PROTECTION
- SEDIMENT CONTROL TUBE
- STABILIZED CONSTRUCTION ENTRANCE
- TURBIDITY BARRIER
- WETLAND BOUNDARY
- LIMITS OF CONSTRUCTION
- FULL DEPTH PAVEMENT REMOVAL
- SEDIMENT BASIN
- TREE REMOVAL
- CONSTRUCTION FENCE
- PAVEMENT SAWCUT
- PROTECT
- REMOVE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- SAN UNDERGROUND SANITARY SEWER
- G UNDERGROUND GAS
- E UNDERGROUND ELECTRIC
- OH OVERHEAD
- BUILDING HATCH
- CONCRETE HATCH
- ASPHALT HATCH

SEALS AND SIGNATURES

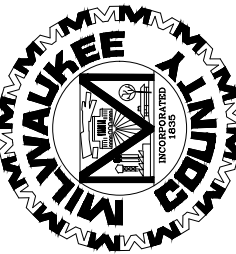
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EXISTING, SITE PREP, EROSION &
SEDIMENT CONTROL - AREA E

BEACH IMPROVEMENTS
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2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

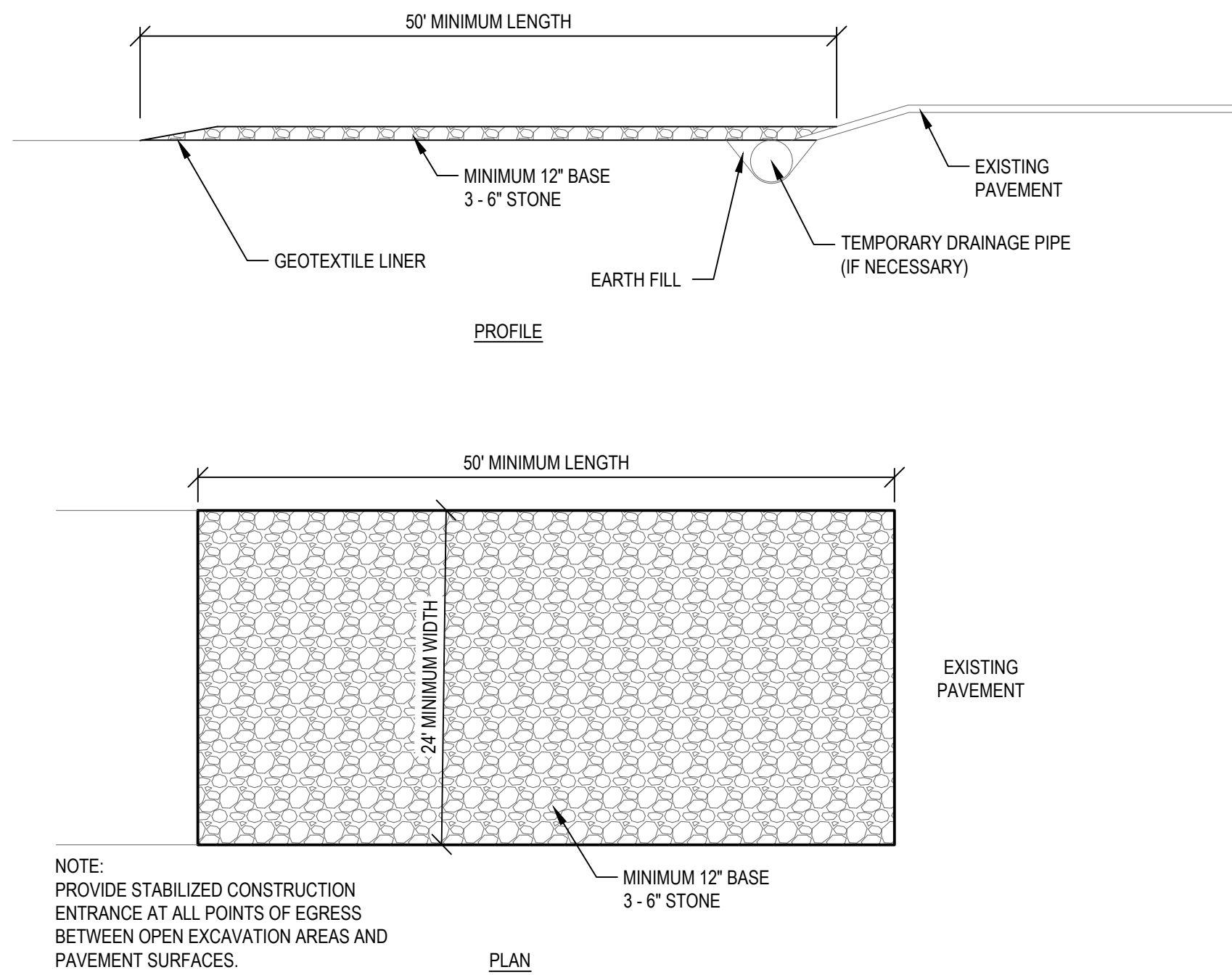


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Architectural, Engineering & Environmental Services
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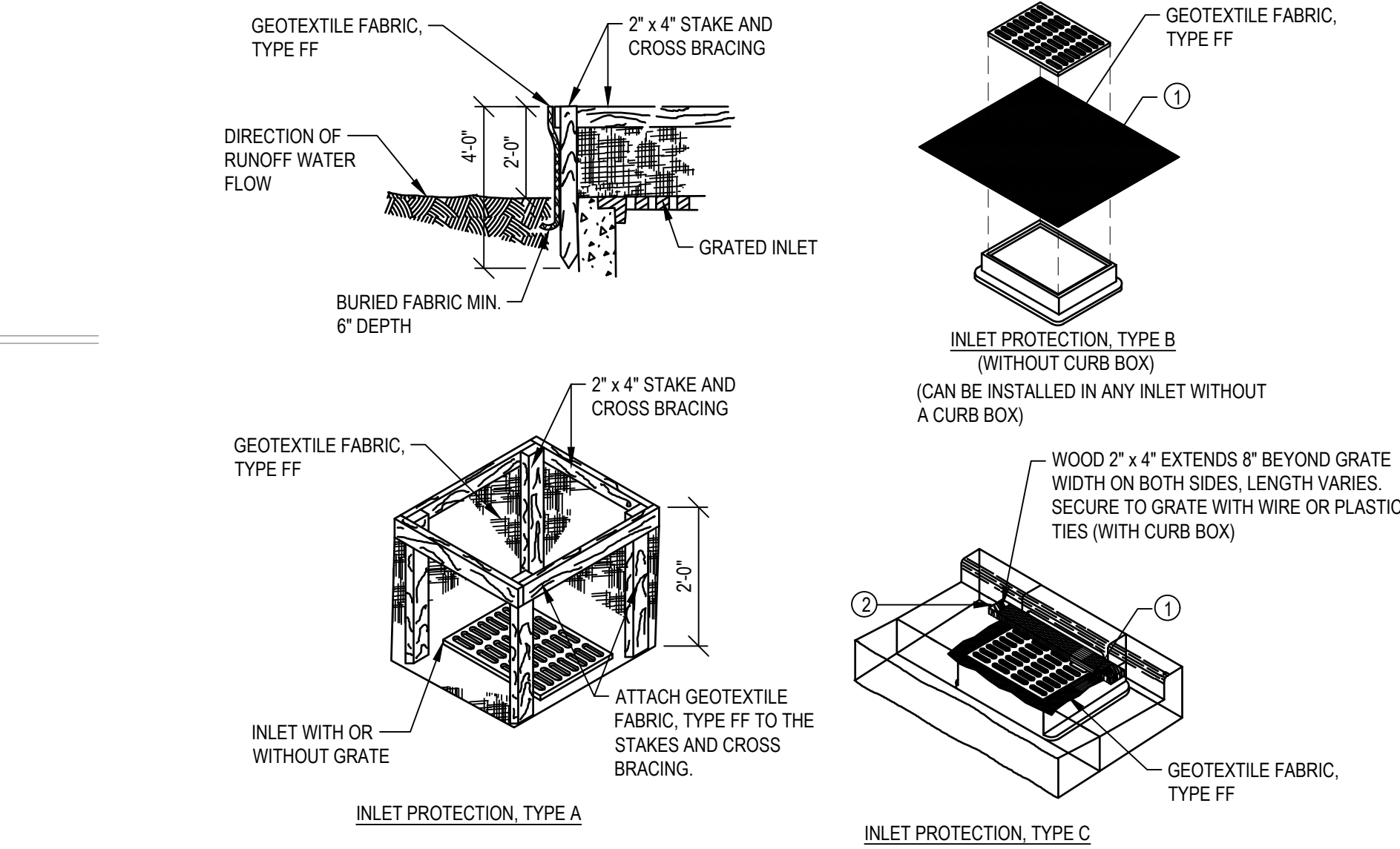
DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CE105

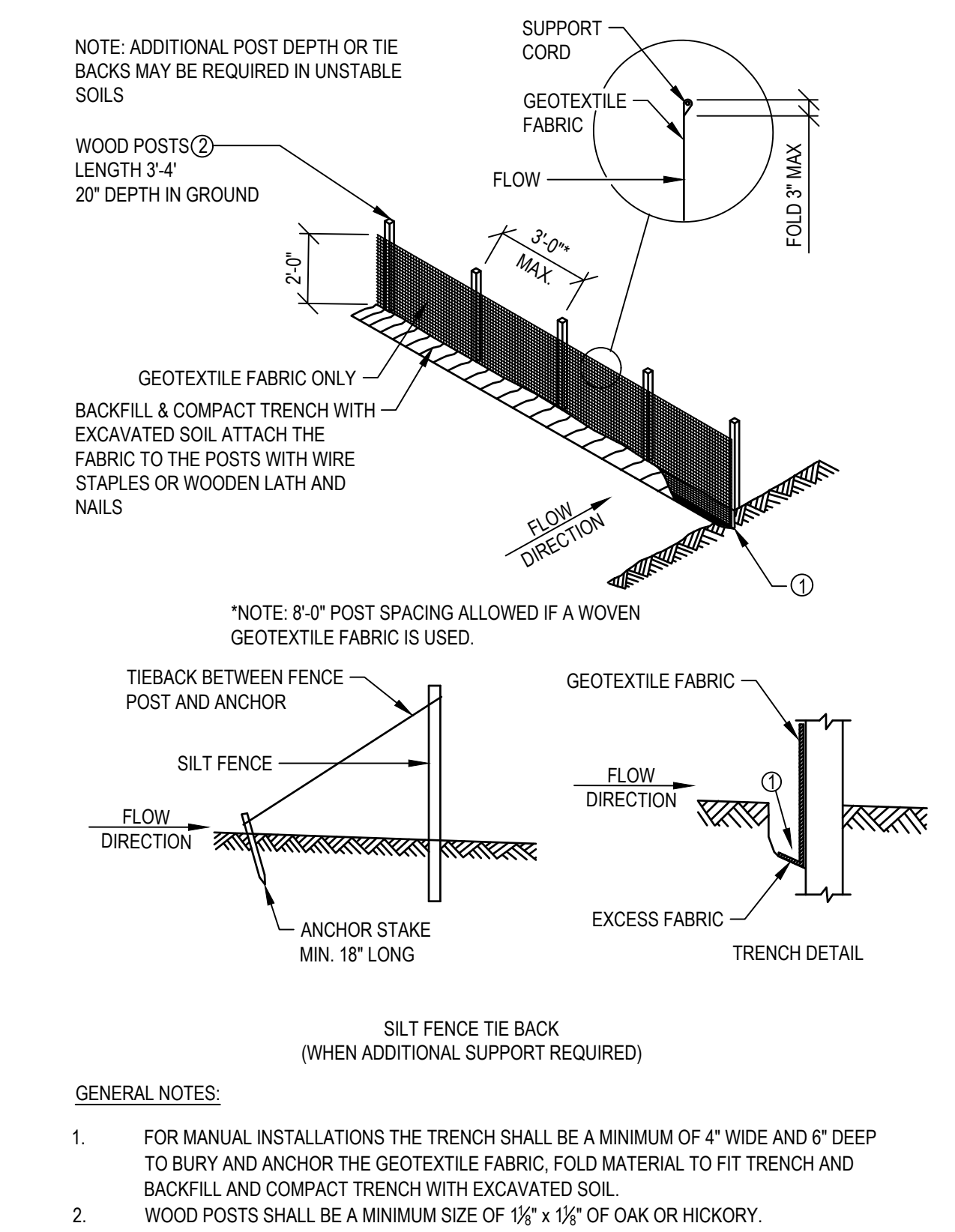
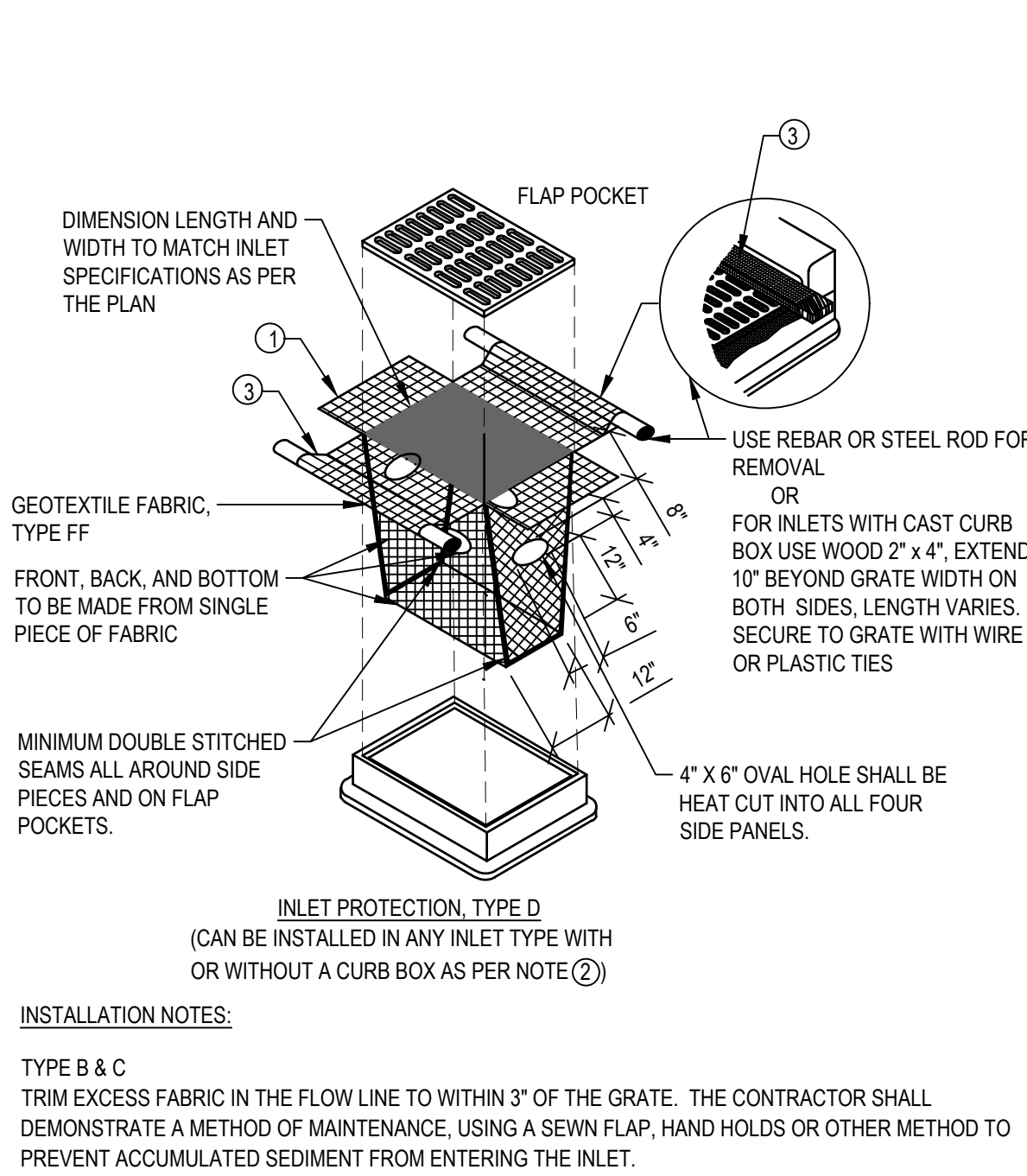
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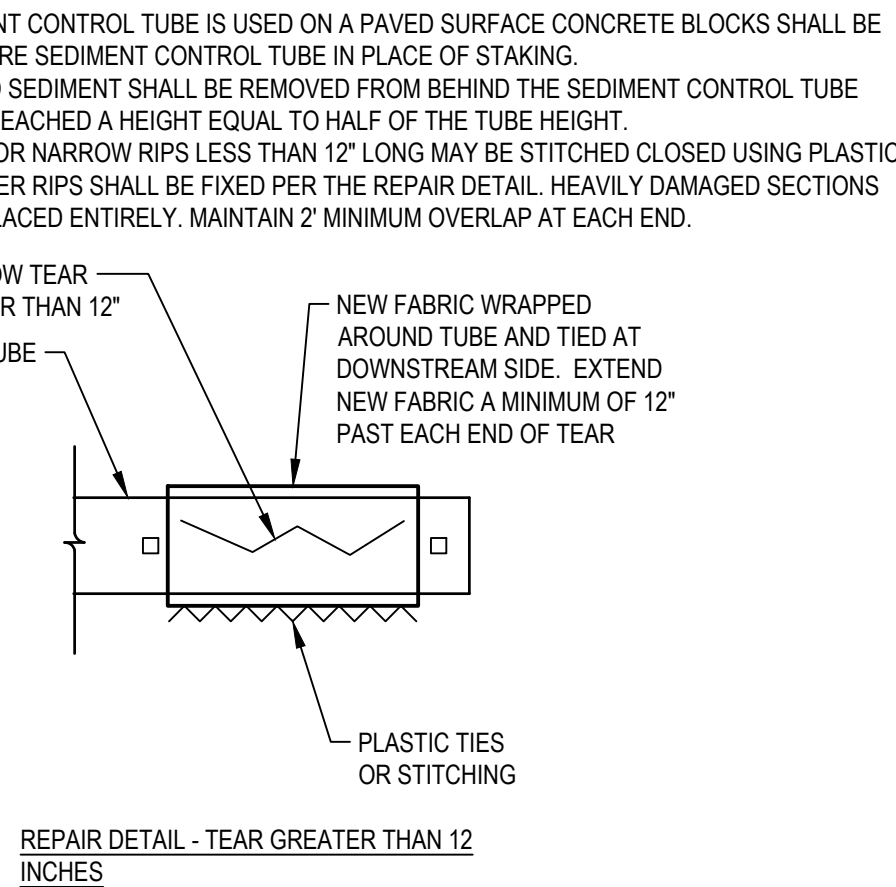
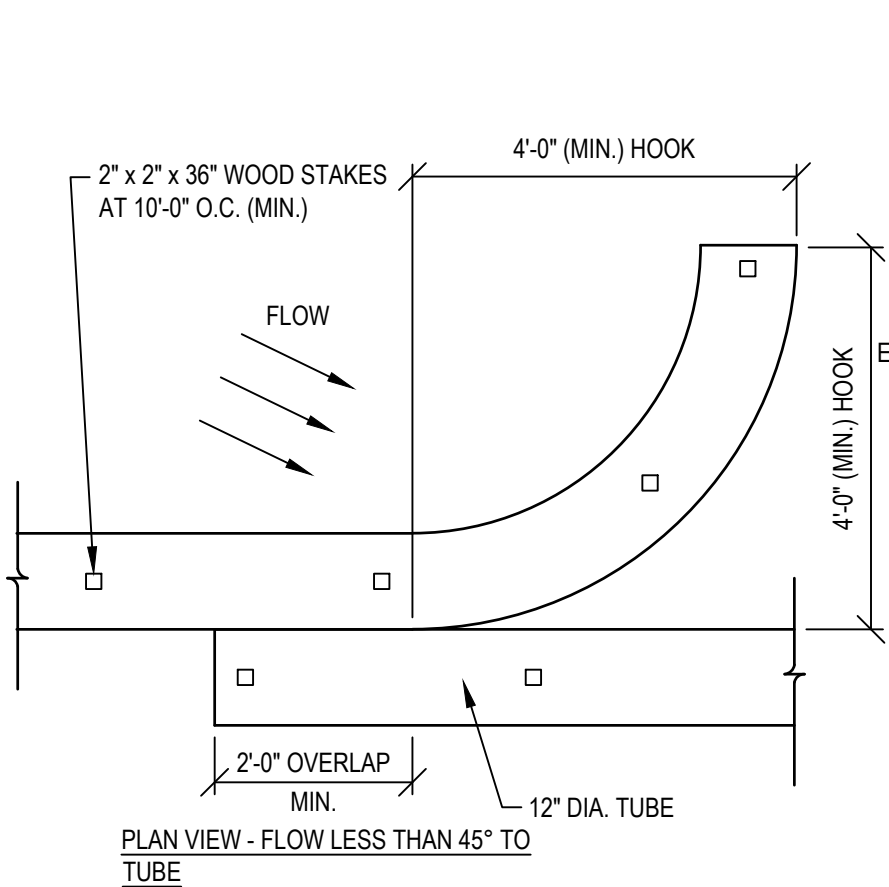
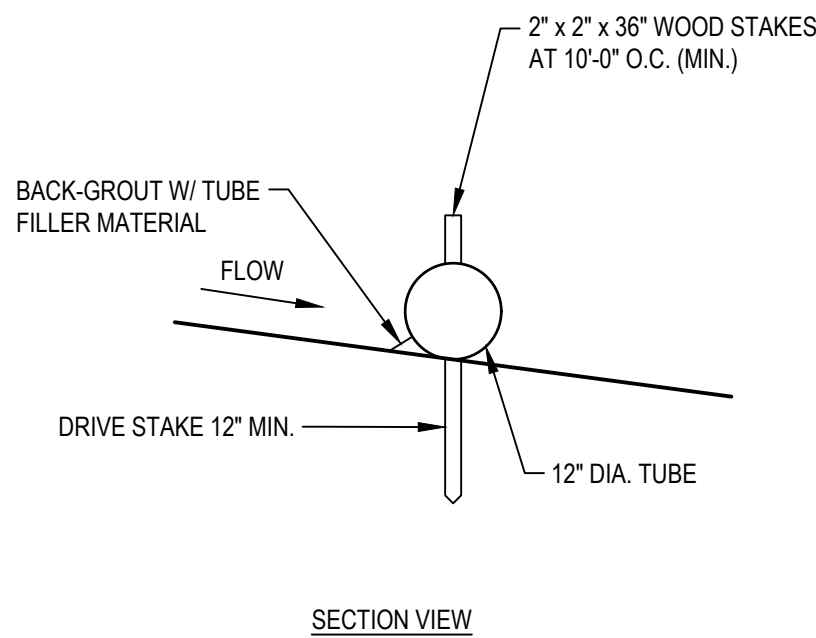
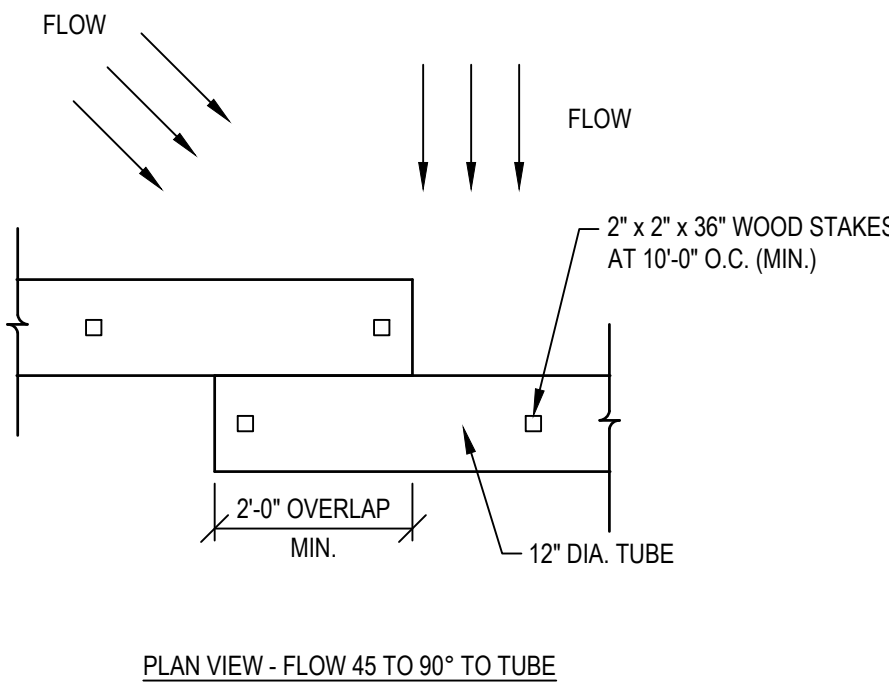
1 STABILIZED CONSTRUCTION ENTRANCE



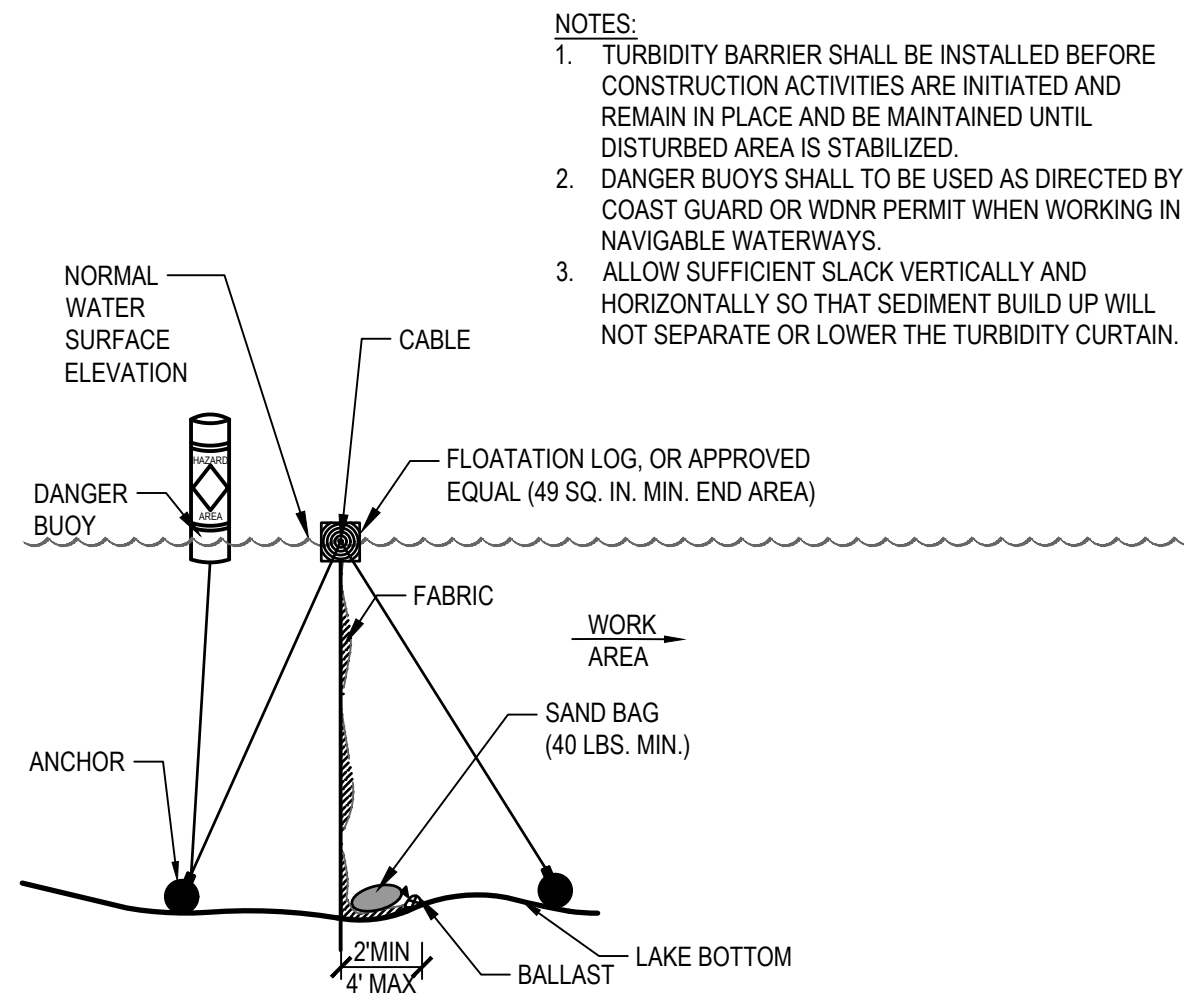
2 INLET PROTECTION



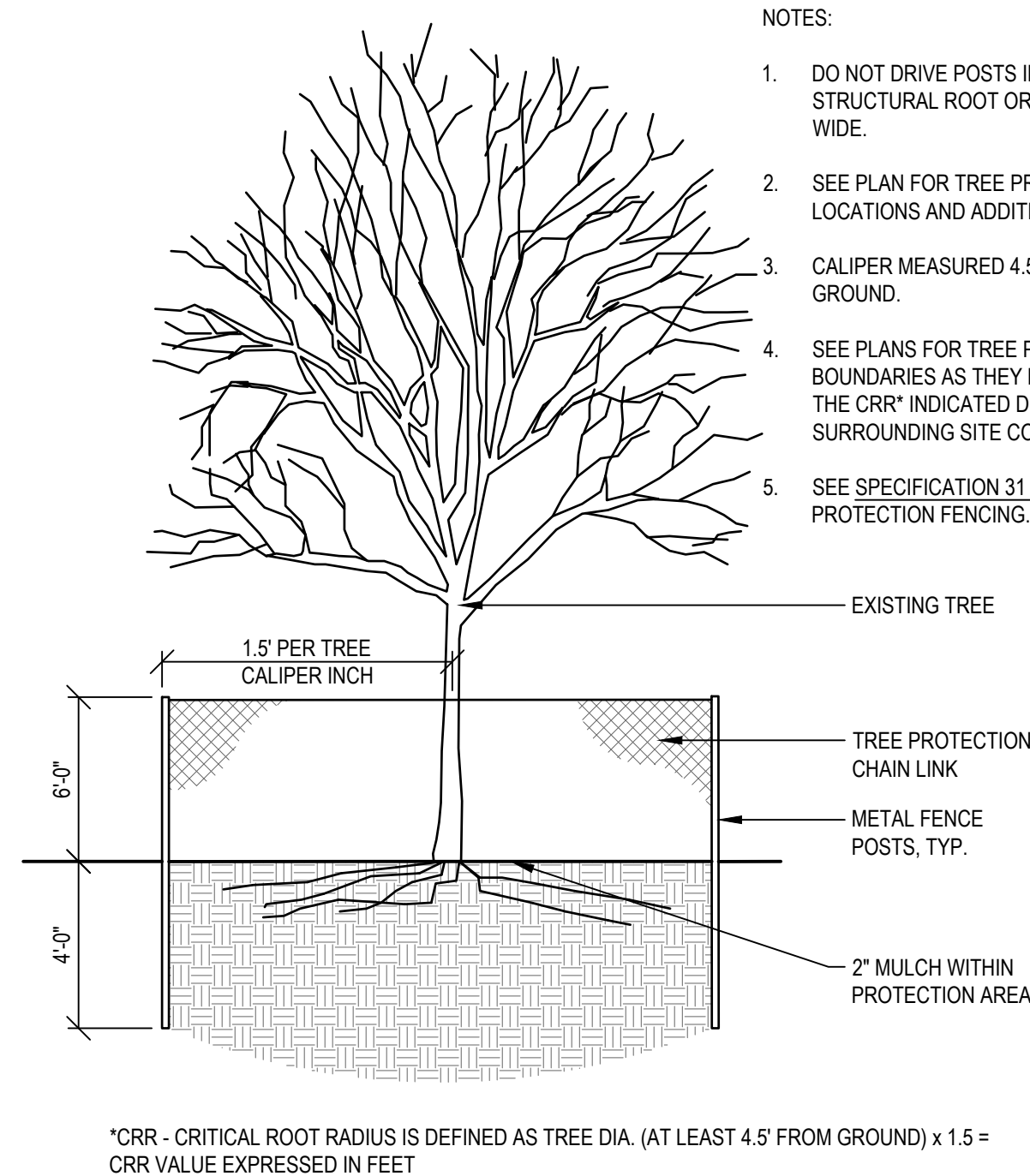
3 SILT FENCE



4 SEDIMENT CONTROL TUBE



5 TURBIDITY BARRIER



6 TREE PROTECTION FENCE

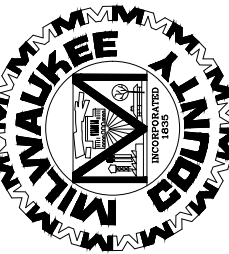
SEALS AND SIGNATURES

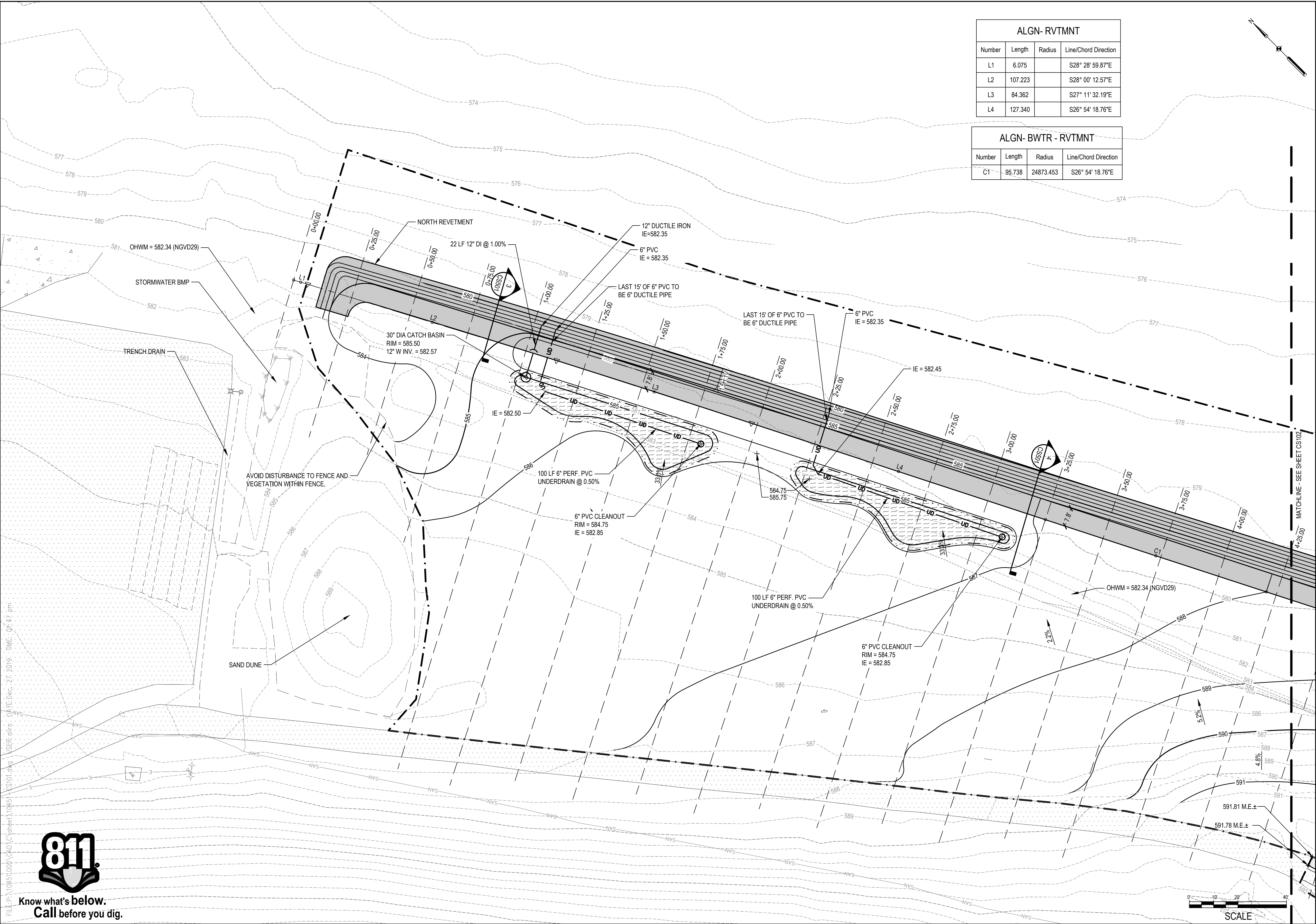
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MADISON, WI 53703
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EROSION & SEDIMENT
CONTROL DETAILS





ALGN- RVTMNT			
Number	Length	Radius	Line/Chord Direction
L1	6.075		S28° 28' 59.87"E
L2	107.223		S28° 00' 12.57"E
L3	84.362		S27° 11' 32.19"E
L4	127.340		S26° 54' 18.76"E

ALGN- BWTR - RVTMNT			
Number	Length	Radius	Line/Chord Direction
C1	95.738	24873.453	S26° 54' 18.76"E

SHEET NOTES

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
2. BATHYMETRY INFORMATION CONSISTS OF A SURVEY FIELD WORK PERFORMED BY KSINGH ENGINEERS ON NOVEMBER, 2019 AND LIDAR 2012 INFORMATION.
3. TRANSITIONS FROM PVC TO DI STORM PIPE SHALL BE MADE BY FERNCO OR MISSION COUPLINGS.
4. ACCEPTABLE DREDGE/EXCAVATED MATERIAL WILL BE USED AS

LEGEND

1

CS503

6

CS501

2

CS503

2

CS501

3

CS503

4

CS503

9

CS503

1

CS504

2

CS504

ASPHALT PAVEMENT

BREAKWATER WALKWAY

HEAVY DUTY CONCRETE PAVEMENT

CONCRETE PAVEMENT

BEACH SAND

BIORETENTION POND

ARMOR STONE

CONTROL JOINT

ISOLATION (EXPANSION) JOINT

SPLIT RAIL FENCE

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

GRADING LIMITS

GRADE BREAK LINE

LIMITS OF CONSTRUCTION

DRAINAGE SLOPE

DRAINAGE SWALE

FLOW DIRECTION

COASTAL STRUCTURE SIDE SLOPE

FLARED END SECTION

CLEANOUT

UNDERDRAIN

CATCH BASIN

SOLID PAVEMENT MARKING

BIKE LANE PAVEMENT MARKING

EXISTING ASPHALT

NOT FOR CONSTRUCTION

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LAYOUT, MATERIALS & GRADING
PLAN - AREA A

BEACH IMPROVEMENTS
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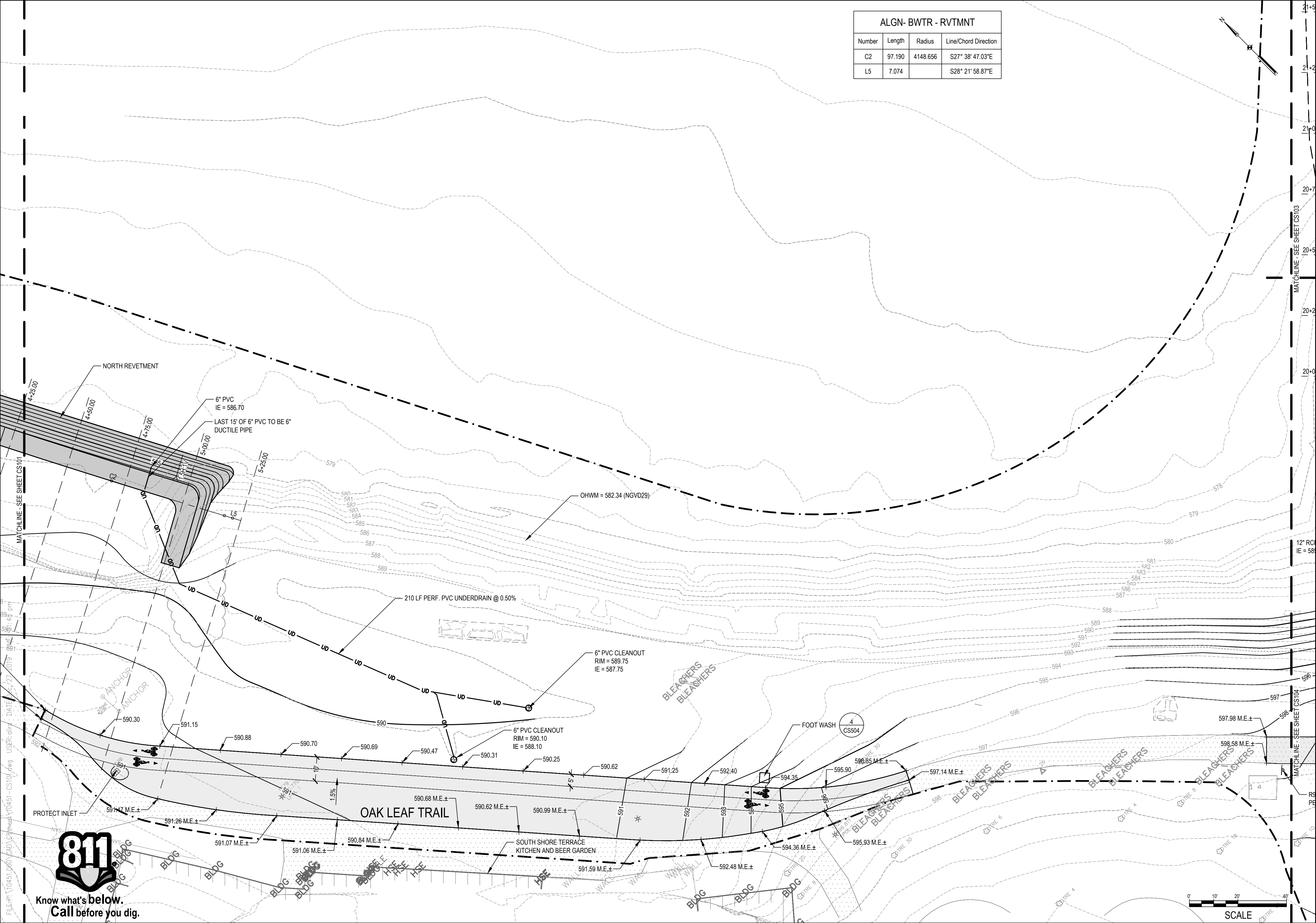
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CS101

FILE: P:\10451\000\CAD\Civil\Sheet\10451\CS101.dwg USER: dno DATE: Dec. 27, 2019 TIME: 09:47 pm

Know what's below.
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ALGN- BWTR - RVTMNT			
Number	Length	Radius	Line/Chord Direction
C2	97.190	4148.656	S27° 38' 47.03"E
L5	7.074		S28° 21' 58.87"E

- SHEET NOTES
1.

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2.

VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
2.

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3.

TRANSITIONS FROM PVC TO DI STORM PIPE SHALL BE MADE BY FERNCO OR MISSION COUPLINGS.
4.

ACCEPTABLE DREDGE/EXCAVATED MATERIAL WILL BE USED AS

LEGEND

ASPHALT PAVEMENT

1

CS503

BREAKWATER WALKWAY

6

CS501

HEAVY DUTY CONCRETE PAVEMENT

2

CS503

CONCRETE PAVEMENT

2

CS503

BEACH SAND

2

CS501

BIORETENTION POND

2

CS501

ARMOR STONE

3

CS503

CONTROL JOINT

3

CS503

ISOLATION (EXPANSION) JOINT

4

CS503

SPLIT RAIL FENCE

9

CS503

865

PROPOSED MAJOR CONTOUR

864

PROPOSED MINOR CONTOUR

GRADING LIMITS

GRADE BREAK LINE

LIMITS OF CONSTRUCTION

2.5%

DRAINAGE SLOPE

DRAINAGE SWALE

FLOW DIRECTION

1.5H:1V

COASTAL STRUCTURE SIDE SLOPE

FLARED END SECTION

1

CS504

CLEANOUT

1

CS504

UD

UNDERDRAIN

CATCH BASIN

2

CS504

SOLID PAVEMENT MARKING

BIKE LANE PAVEMENT MARKING

EXISTING ASPHALT

SEALS AND SIGNATURES

FILE: P:\10451\000\ADD\CS102.dwg USER: air DATE: 12/13/2019

811 Know what's below. Call before you dig.

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SMITHGROUP

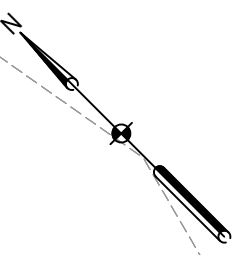
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LAYOUT, MATERIALS & GRADING
PLAN - AREA B

CS102



ALGN- NORTH BWTR			
Number	Length	Radius	Line/Chord Direction
L6	247.825		N44° 57' 45.63"E



1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
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4. ACCEPTABLE DREDGE/EXCAVATED MATERIAL WILL BE USED AS

	ASPHALT PAVEMENT	
	BREAKWATER WALKWAY	
	HEAVY DUTY CONCRETE PAVEMENT	
	CONCRETE PAVEMENT	
	BEACH SAND	
	BIORETENTION POND	
	ARMOR STONE	
	CONTROL JOINT	
	ISOLATION (EXPANSION) JOINT	
	SPLIT RAIL FENCE	
	PROPOSED MAJOR CONTOUR	
	PROPOSED MINOR CONTOUR	
	GRADING LIMITS	
	GRADE BREAK LINE	
	LIMITS OF CONSTRUCTION	
	2.5% DRAINAGE SLOPE	
	DRAINAGE SWALE	
	FLOW DIRECTION	
	1.5H:1V COASTAL STRUCTURE SIDE SLOPE	
	FLARED END SECTION	
	CLEANOUT	
	UNDERDRAIN	
	CATCH BASIN	
	SOLID PAVEMENT MARKING	
	BIKE LANE PAVEMENT MARKING	
	EXISTING ASPHALT	

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

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LAYOUT, MATERIALS & GRADING
PLAN - AREA C

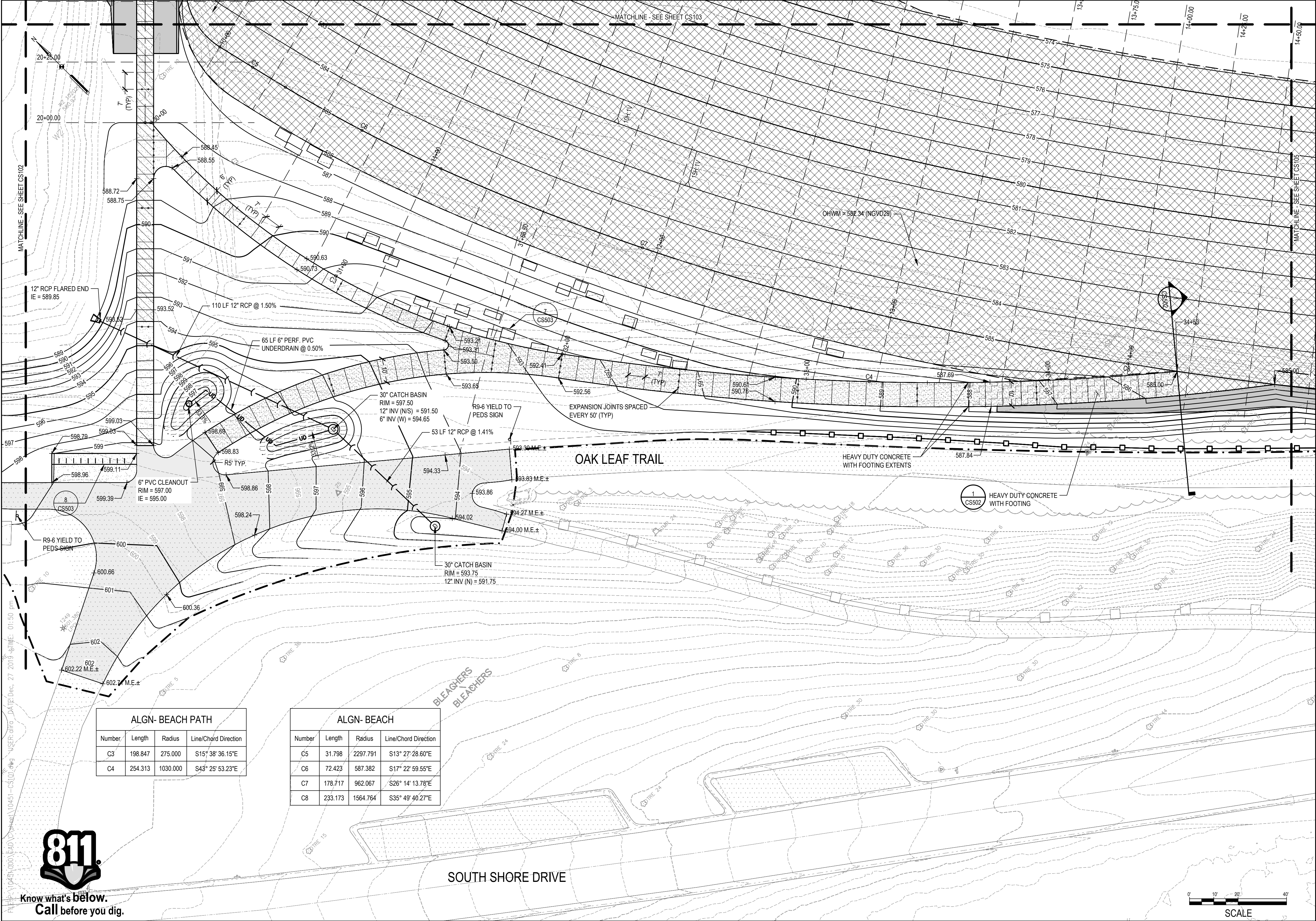
BEACH IMPROVEMENTS
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FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE SUITE 1000 MILWAUKEE WI 53203

DATE 12/13/2019
PROJECT 0560-17630
SITE NO 639
BUILDING NO

CS103



SHEET NOTES

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3. TRANSITIONS FROM PVC TO DI STORM PIPE SHALL BE MADE BY FERNCO OR MISSION COUPLINGS.
4. ACCEPTABLE DREDGE/EXCAVATED MATERIAL WILL BE USED AS

LEGEND

	ASPHALT PAVEMENT	1
	BREAKWATER WALKWAY	6
	HEAVY DUTY CONCRETE PAVEMENT	2
	CONCRETE PAVEMENT	2
	BEACH SAND	2
	BIORETENTION POND	2
	ARMOR STONE	2
	CONTROL JOINT	3
	ISOLATION (EXPANSION) JOINT	4
	SPLIT RAIL FENCE	9
	PROPOSED MAJOR CONTOUR	CS503
	PROPOSED MINOR CONTOUR	CS503
	GRADING LIMITS	
	GRADE BREAK LINE	
	LIMITS OF CONSTRUCTION	
	DRAINAGE SLOPE	2.5%
	DRAINAGE SWALE	
	FLOW DIRECTION	
	COASTAL STRUCTURE SIDE SLOPE	1.5H:1V
	FLARED END SECTION	1
	CLEANOUT	CS504
	UNDERDRAIN	
	CATCH BASIN	2
	SOLID PAVEMENT MARKING	
	BIKE LANE PAVEMENT MARKING	
	EXISTING ASPHALT	

SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

SMITHGROUP

44 EAST MIFFLIN STREET
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LAYOUT, MATERIALS & GRADING
PLAN - AREA D

ALGN- BEACH PATH			
Number	Length	Radius	Line/Chord Direction
C3	198.847	275.000	S15° 38' 36.15"E
C4	254.313	1030.000	S43° 25' 53.23"E

ALGN- BEACH			
Number	Length	Radius	Line/Chord Direction
C5	31.798	2297.791	S13° 27' 28.60"E
C6	72.423	587.382	S17° 22' 59.55"E
C7	178.717	962.067	S26° 14' 13.78"E
C8	233.173	1564.764	S35° 49' 40.27"E



Know what's below.
Call before you dig.

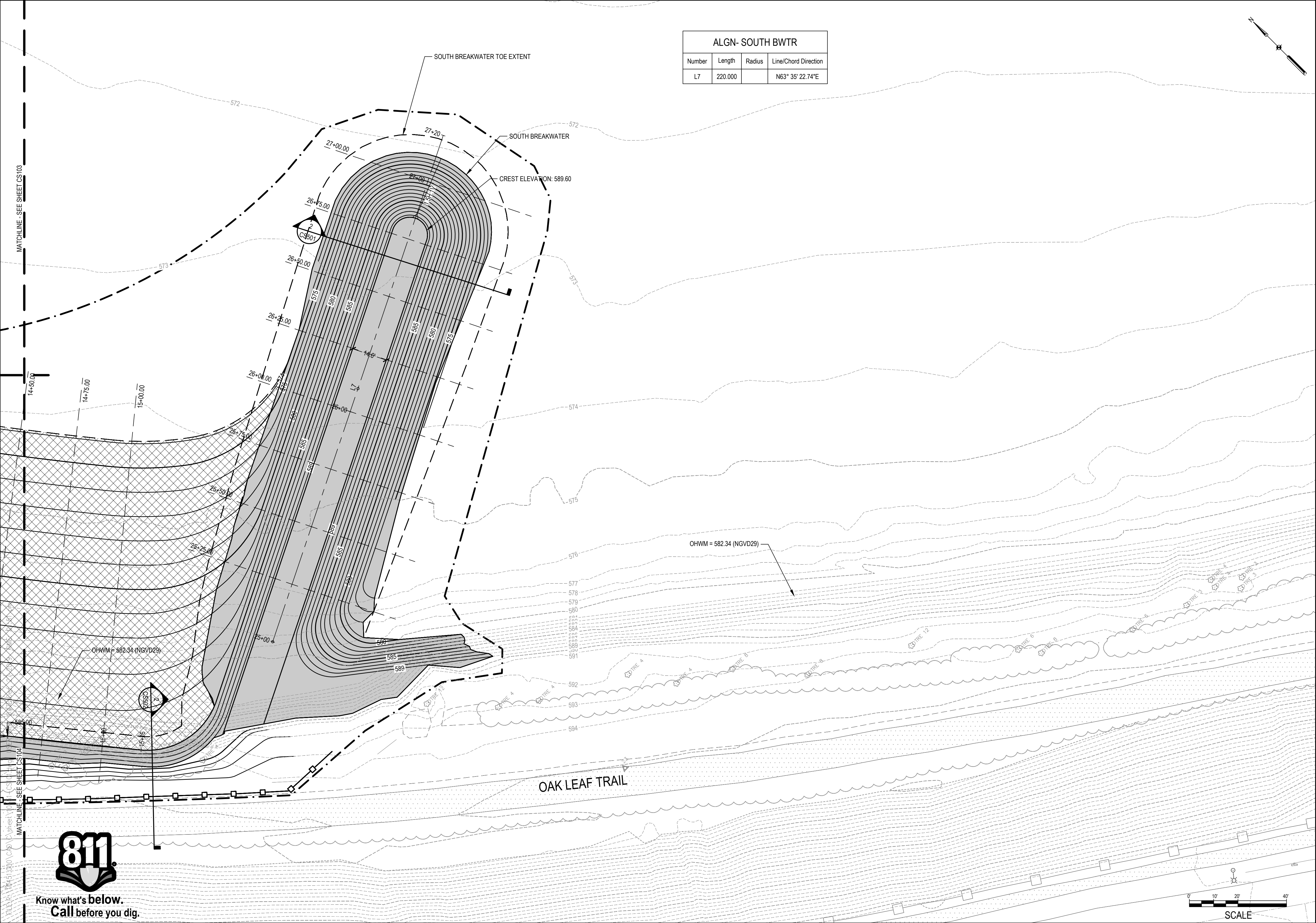
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207



Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CS104



ALGN- SOUTH BWTR			
Number	Length	Radius	Line/Chord Direction
L7	220.000		N63° 35' 22.74"E

- SHEET NOTES
1.

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2.

VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
2.

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3.

TRANSITIONS FROM PVC TO DI STORM PIPE SHALL BE MADE BY FERNCO OR MISSION COUPLINGS.
4.

ACCEPTABLE DREDGE/EXCAVATED MATERIAL WILL BE USED AS

LEGEND

ASPHALT PAVEMENT

1

CS503

BREAKWATER WALKWAY

6

CS501

HEAVY DUTY CONCRETE PAVEMENT

2

CS503

CONCRETE PAVEMENT

2

CS503

BEACH SAND

2

CS501

BIORETENTION POND

2

CS501

ARMOR STONE

3

CS503

CONTROL JOINT

3

CS503

ISOLATION (EXPANSION) JOINT

4

CS503

SPLIT RAIL FENCE

9

CS503

PROPOSED MAJOR CONTOUR

865

PROPOSED MINOR CONTOUR

864

GRADING LIMITS

GRADE BREAK LINE

LIMITS OF CONSTRUCTION

DRAINAGE SLOPE

2.5%

DRAINAGE SWALE

FLOW DIRECTION

COASTAL STRUCTURE SIDE SLOPE

1.5H:1V

FLARED END SECTION

1

CS504

CLEANOUT

1

CS504

UNDERDRAIN

2

CS504

CATCH BASIN

2

CS504

SOLID PAVEMENT MARKING

BIKE LANE PAVEMENT MARKING

EXISTING ASPHALT

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LAYOUT, MATERIALS & GRADING
PLAN - AREA E

CS105

811

Know what's below.
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BEACH IMPROVEMENTS

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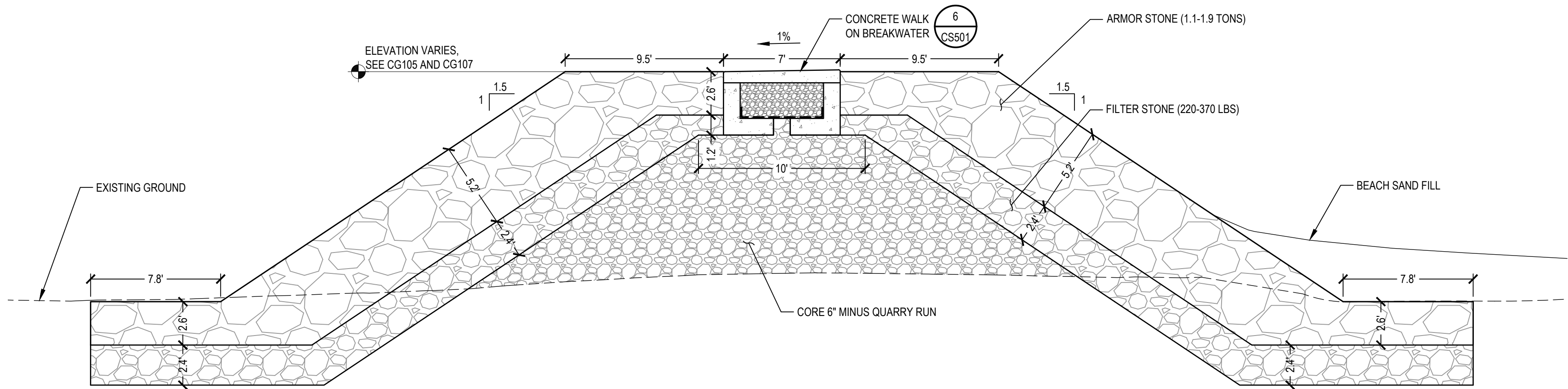
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services

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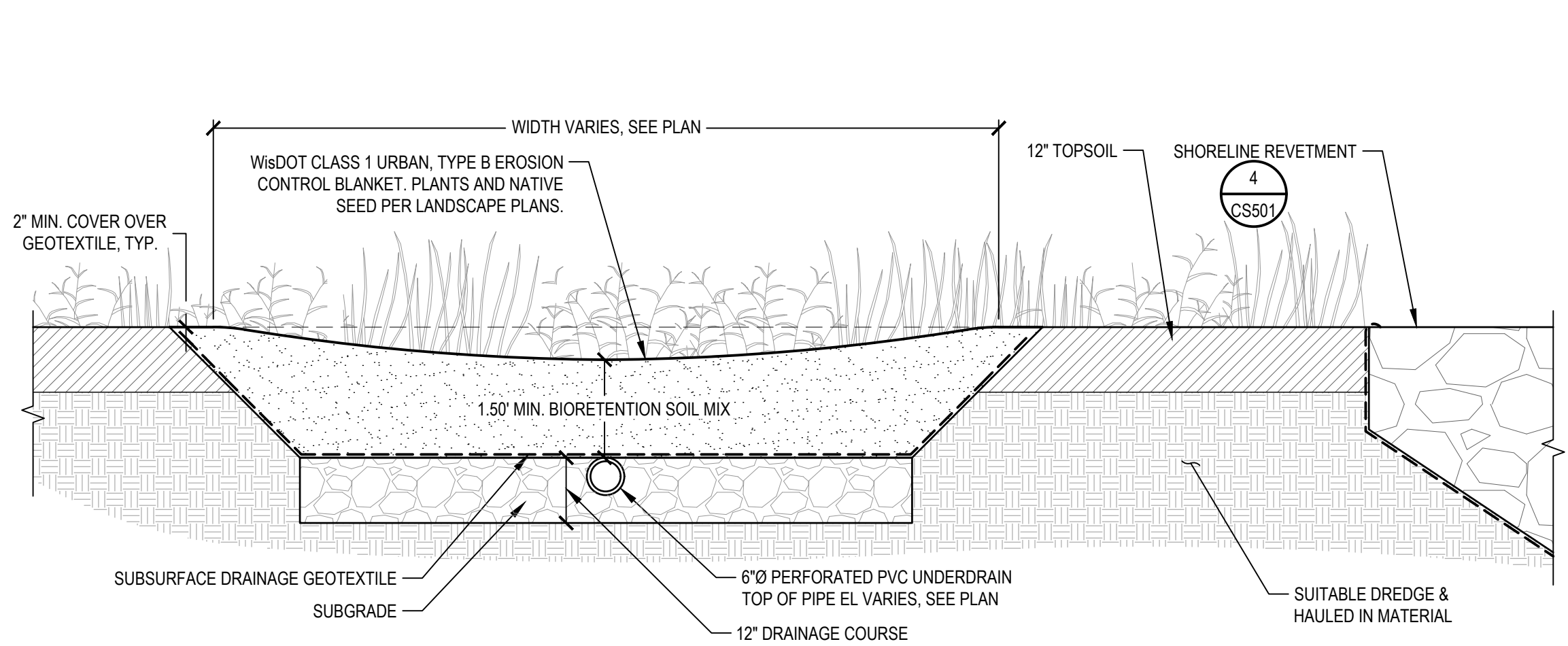
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PROJECT: P560-17630
SITE NO: 639
BUILDING NO: ---

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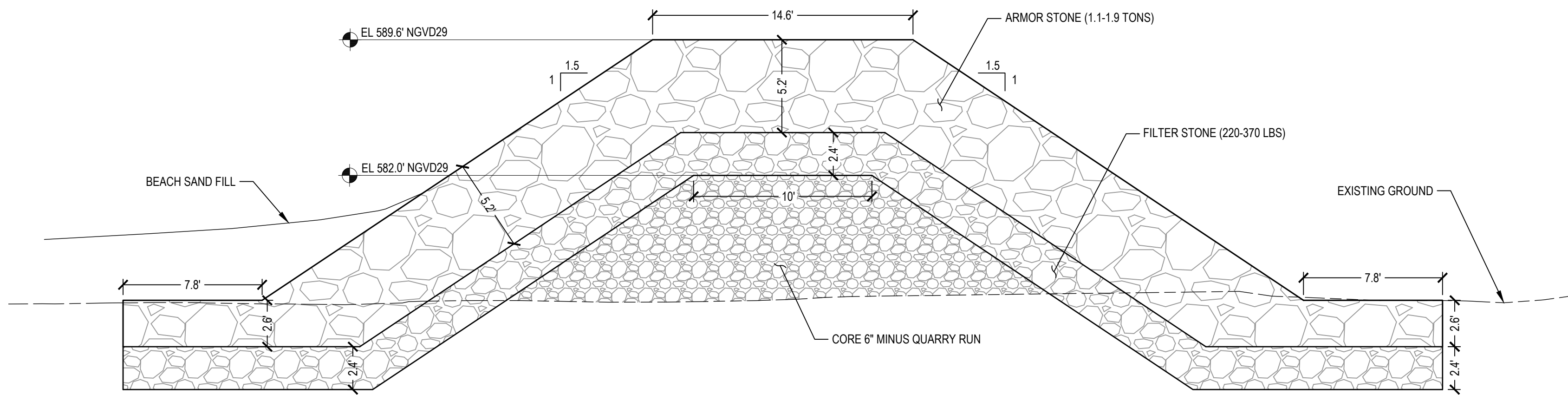
1 NORTH BREAKWATER

SCALE: 1" = 5'



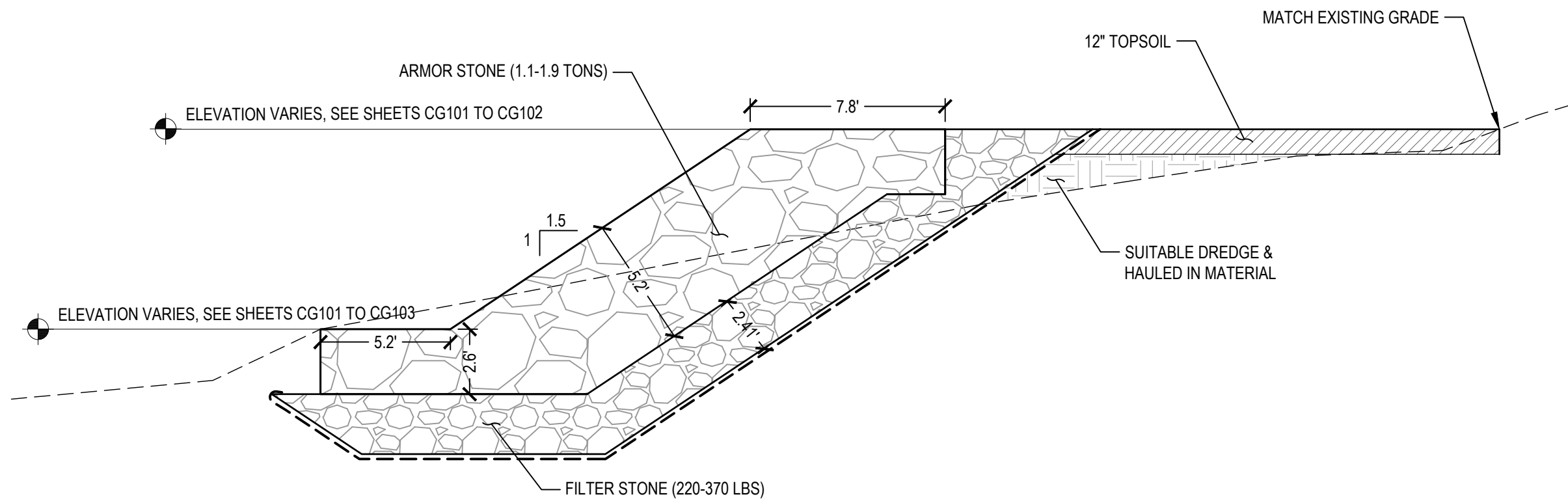
2 BIORETENTION POND TYPICAL SECTION

SCALE: 1/2" = 1'-0"



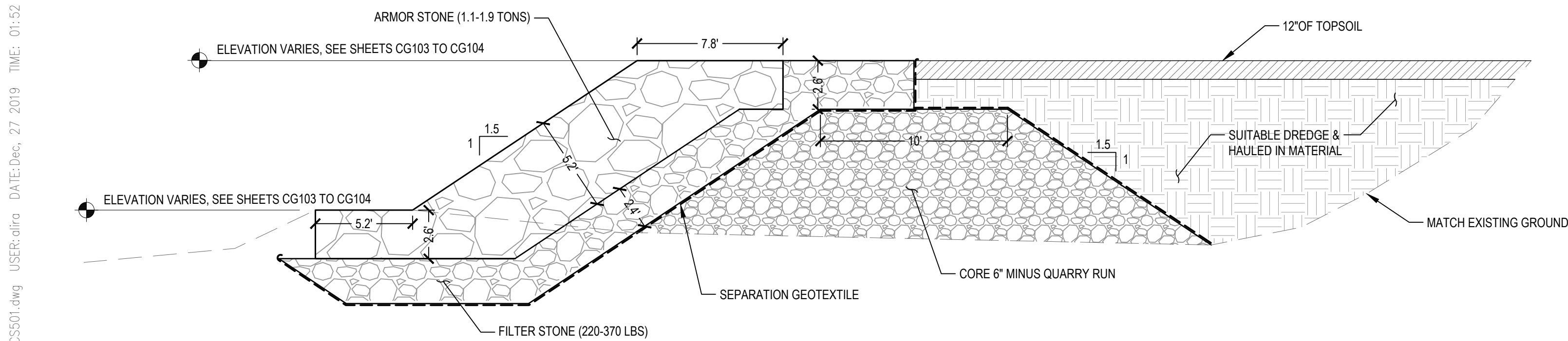
3 SOUTH BREAKWATER

SCALE: 1" = 5'



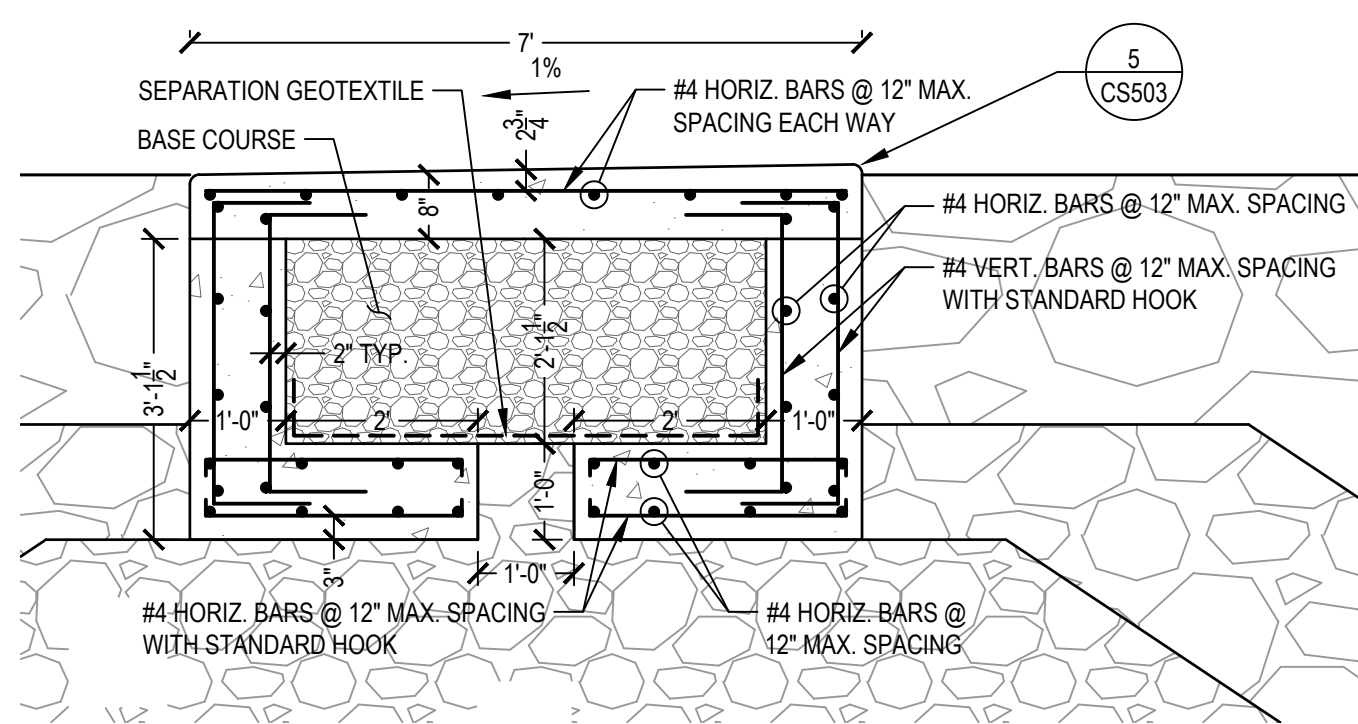
4 REVETMENT - TYPE A

SCALE: 1" = 5'



5 REVETMENT - TYPE B (FILL)

SCALE: 1" = 5'



6 CONCRETE WALK ON BREAKWATER

SCALE: 1/2" = 1'-0"

SEALS AND SIGNATURES

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SITE DETAILS CS501

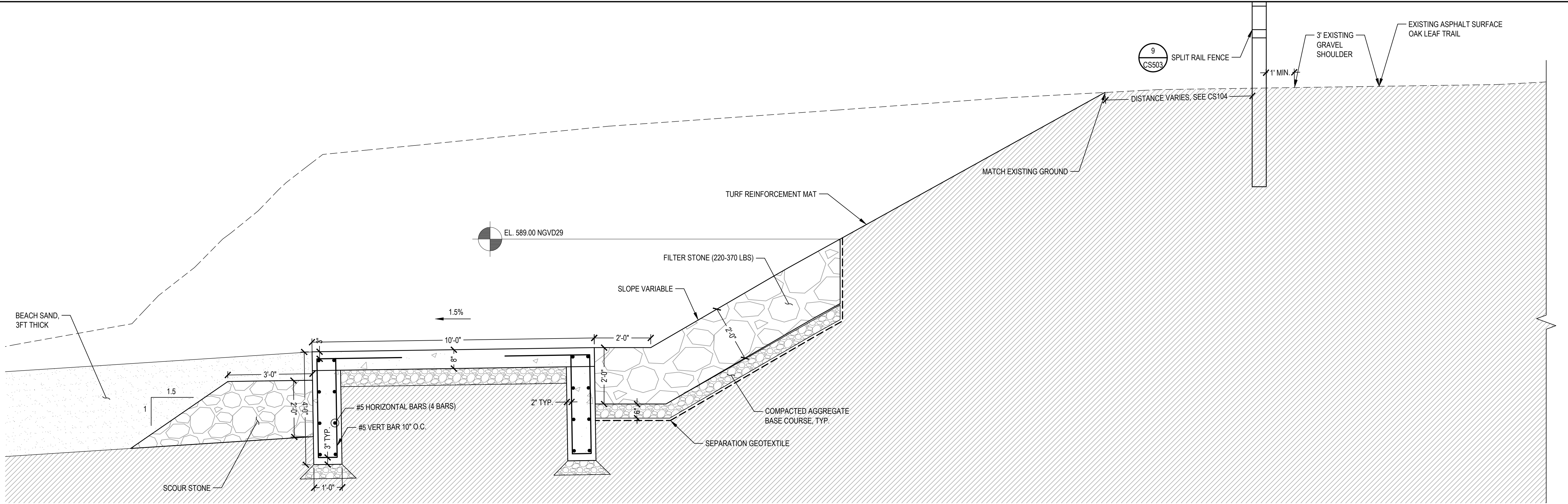
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207



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FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

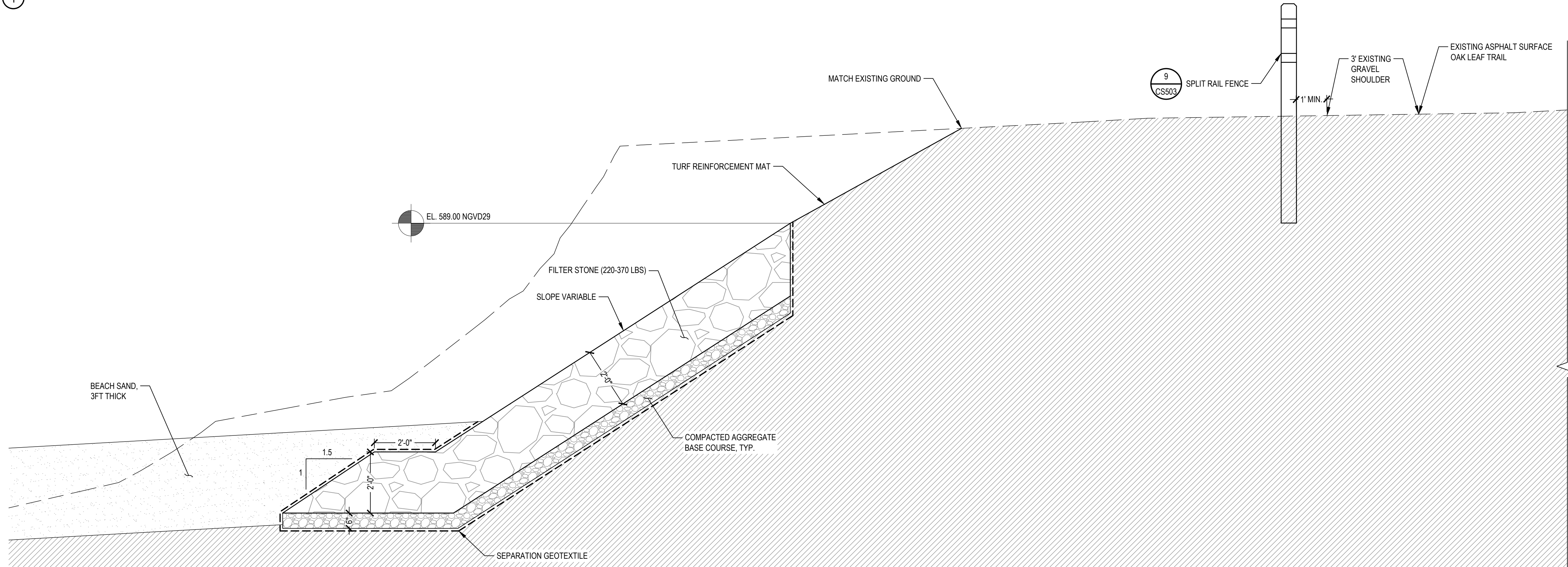
DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

FILE:P:\10451.000\CAD\Civil\sheet\10451-CS502.dwg USER:alira DATE:Dec, 27 2019 TIME: 01:52 pm



1 HEAVY DUTY CONCRETE PAVEMENT WITH FOOTING AT REVETMENT & BEACH

SCALE: 1/2" = 1'-0"



2 REVETMENT AT BEACH

SCALE: 1/2" = 1'-0"

SEALS AND SIGNATURES

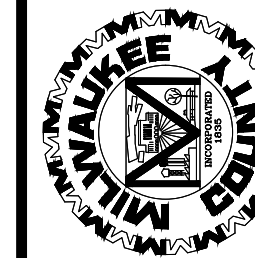
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SITE DETAILS

BEACH IMPROVEMENTS
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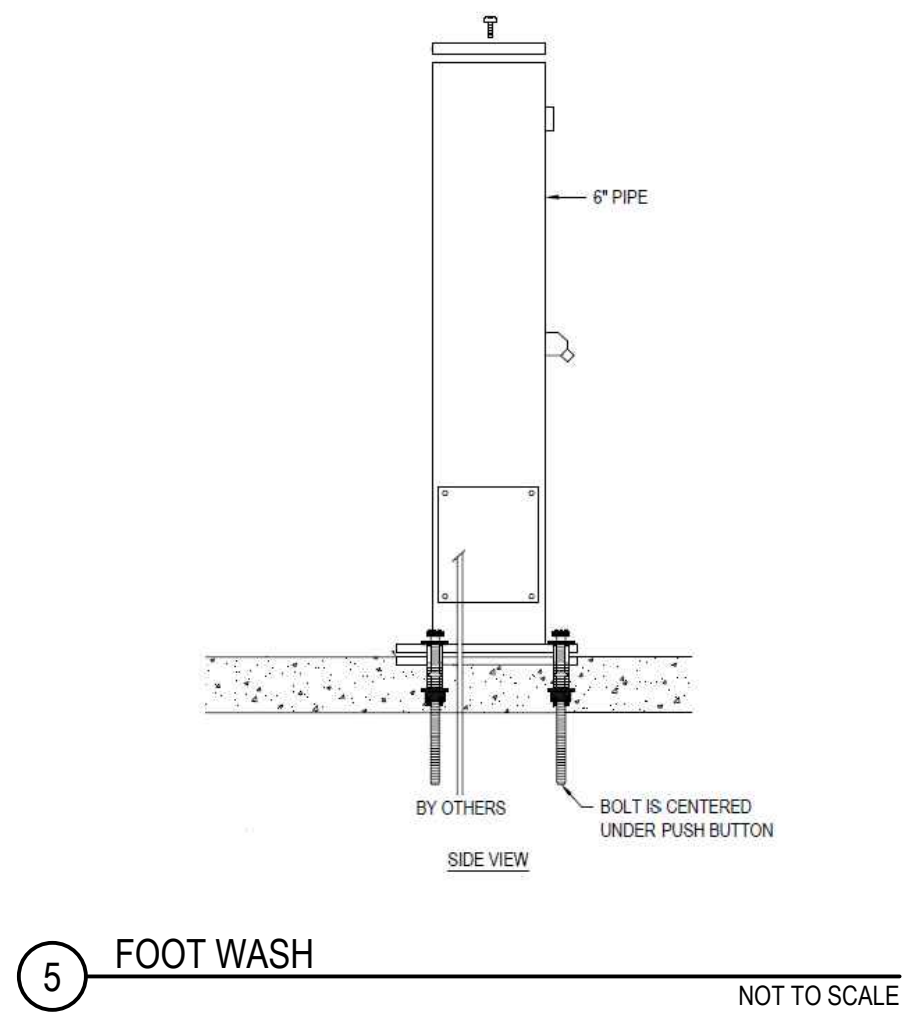
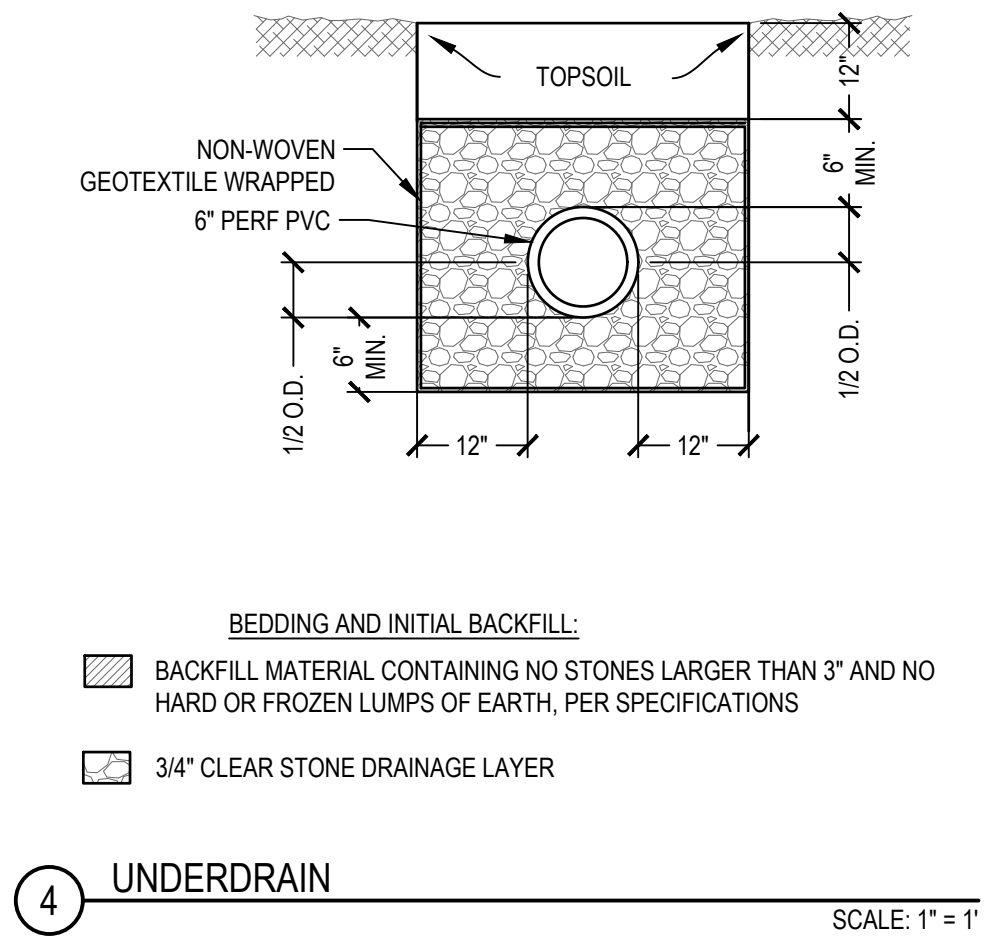
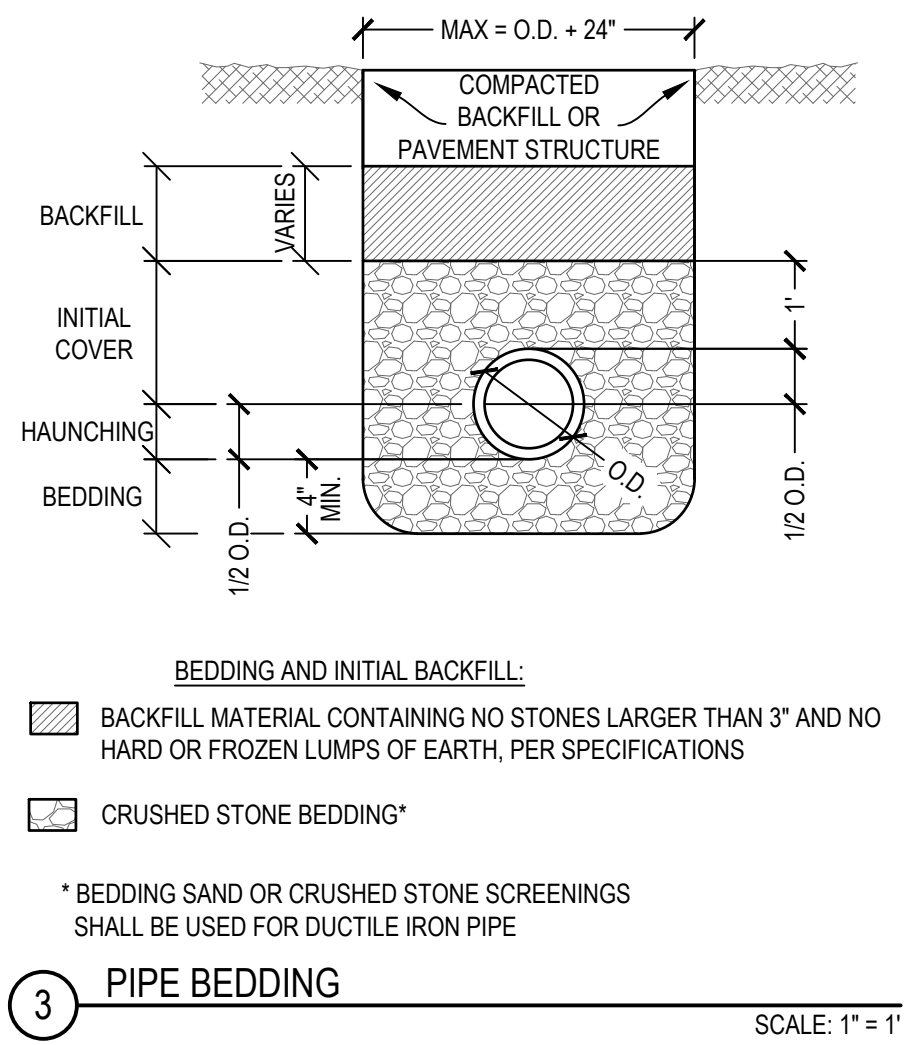
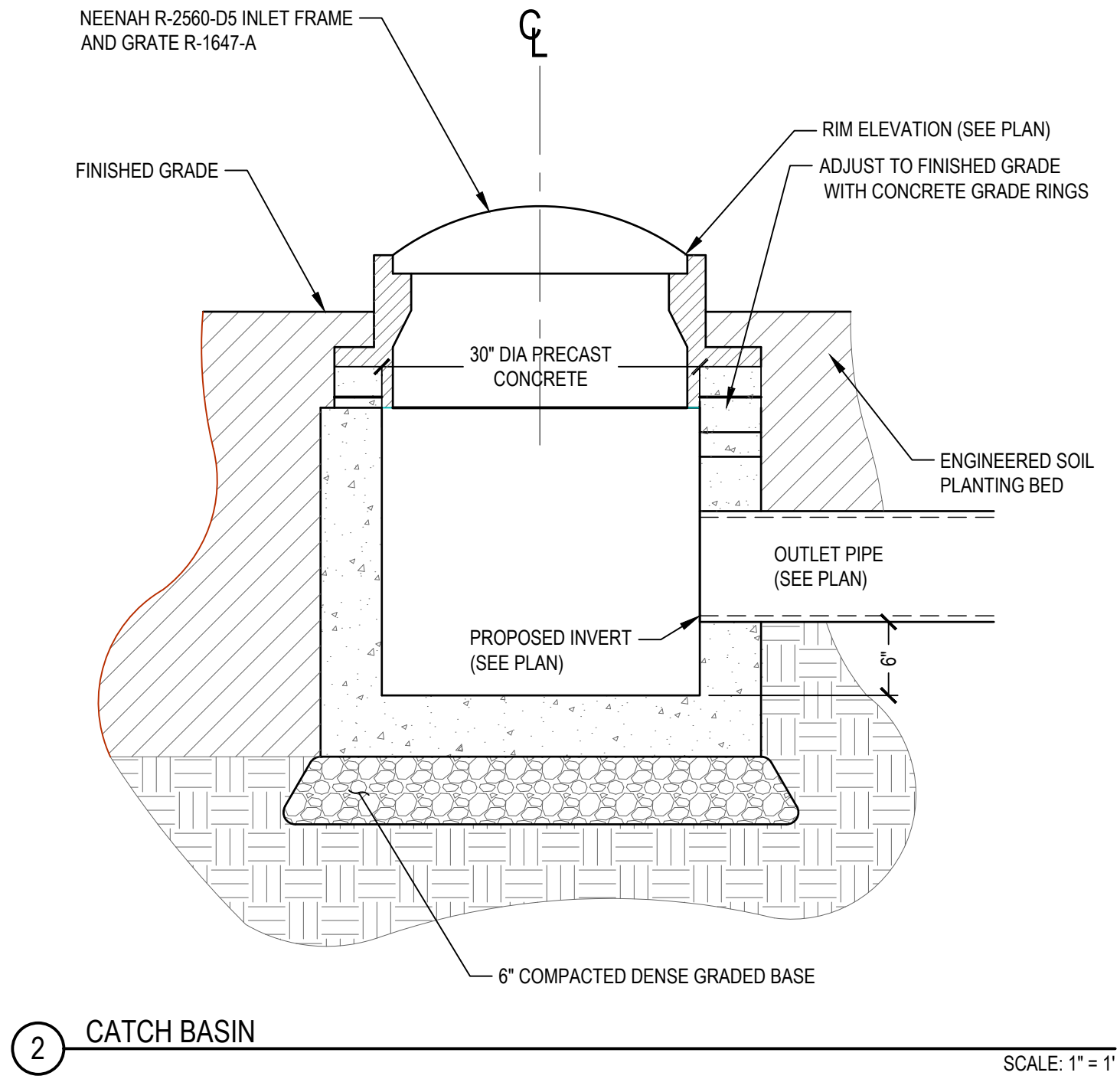
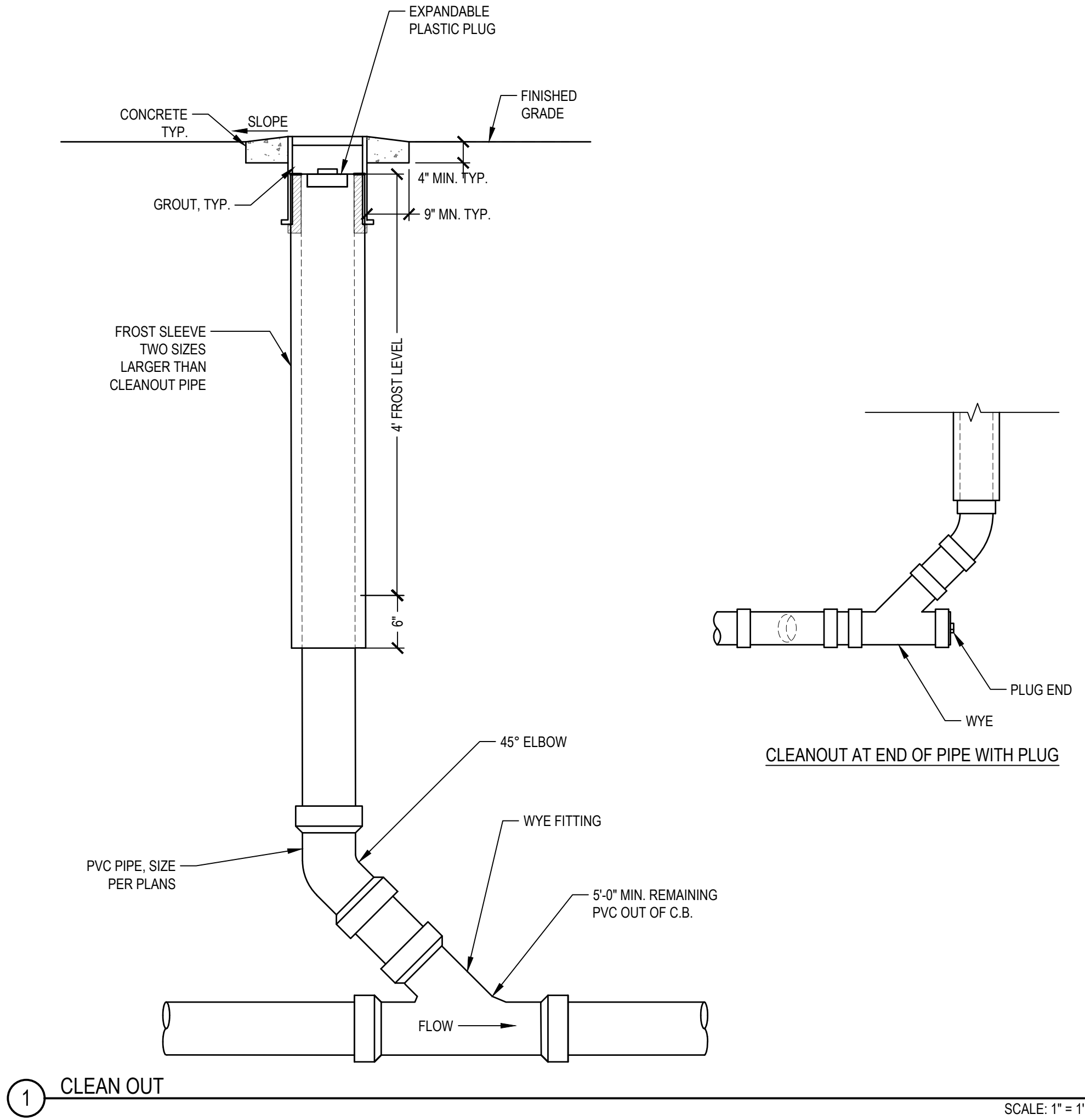


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DATE:
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PROJECT:
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SITE NO:
639
BUILDING NO:

CS502

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SEALS AND SIGNATURES

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UTILITY DETAILS

BEACH IMPROVEMENTS
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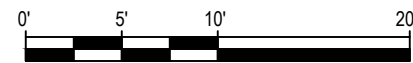
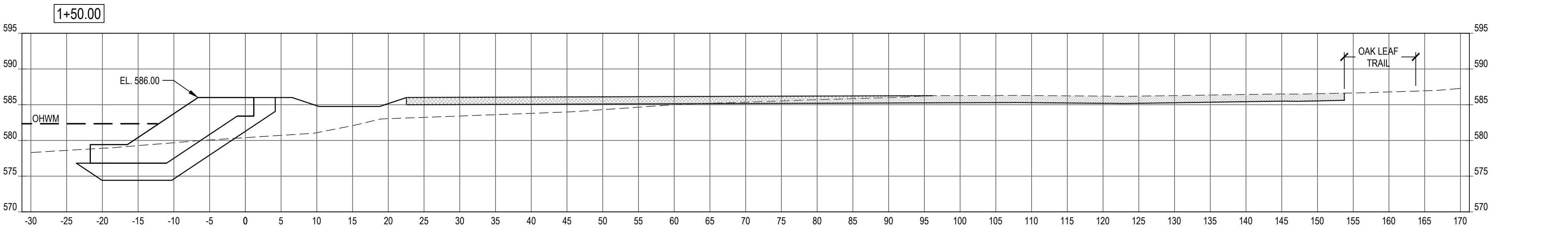
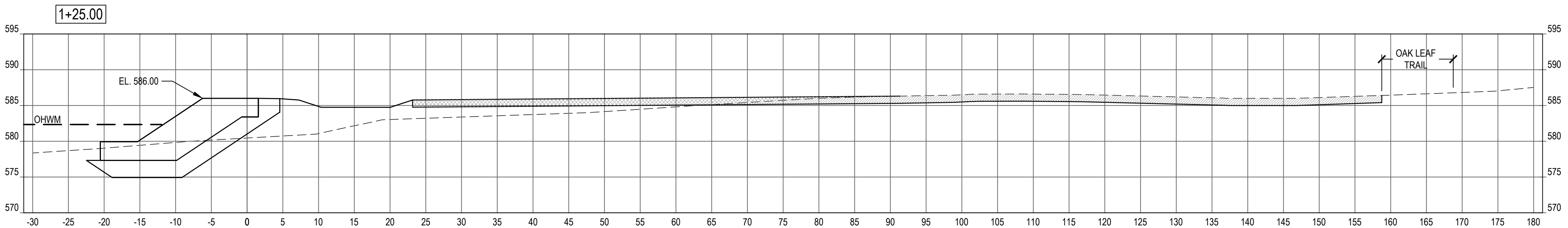
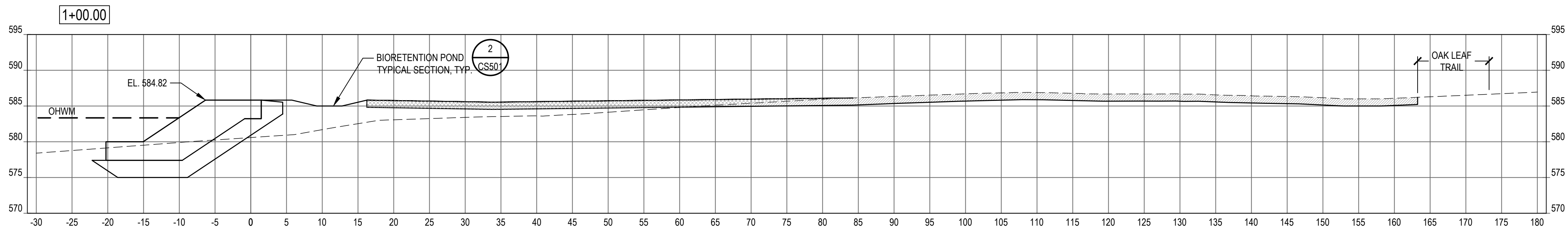
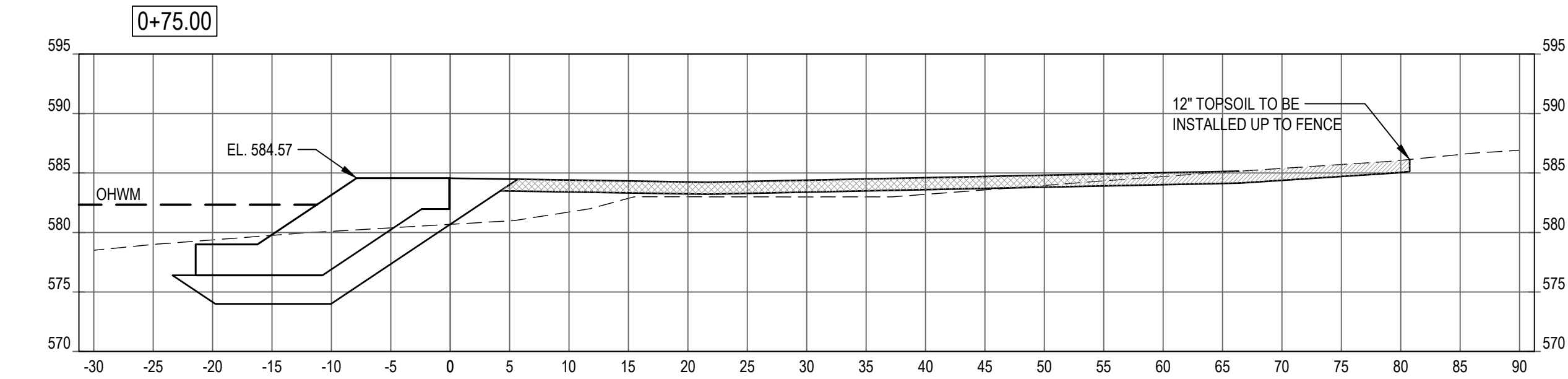
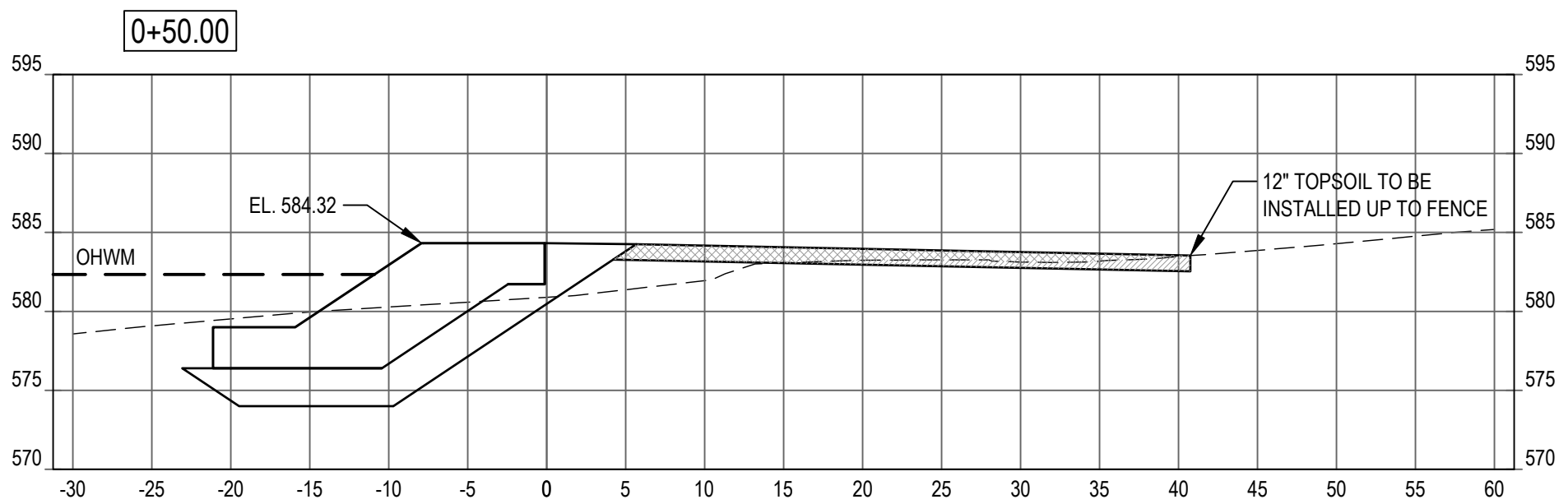
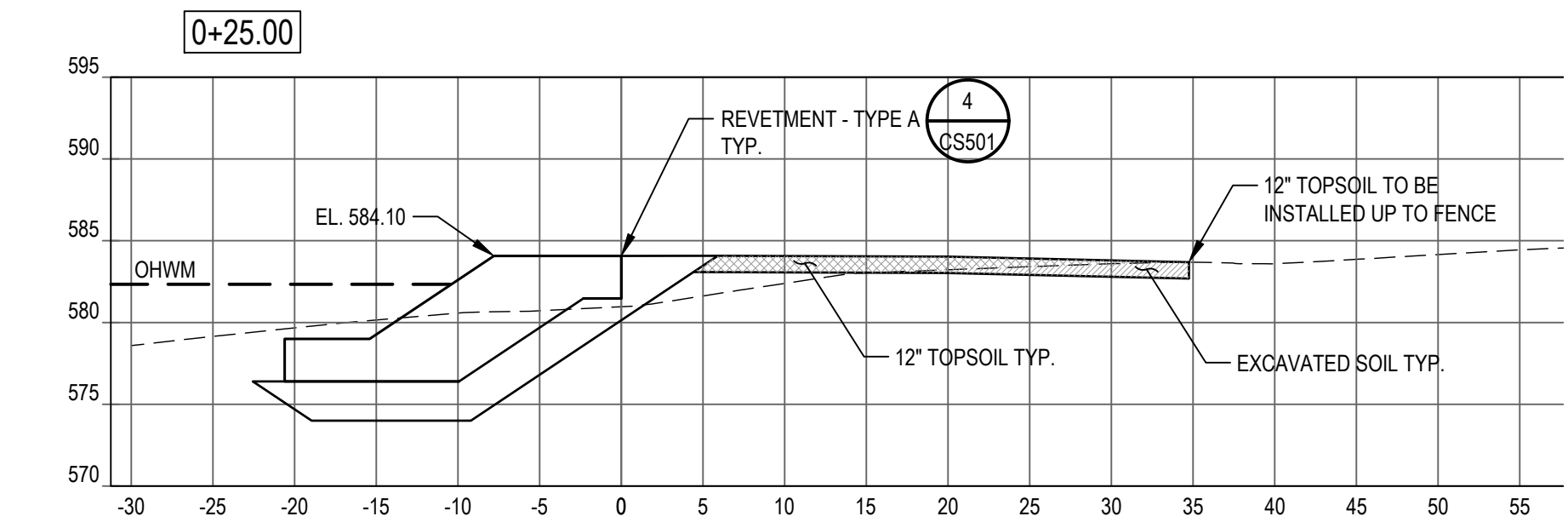


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633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CS504

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SEALS AND SIGNATURES

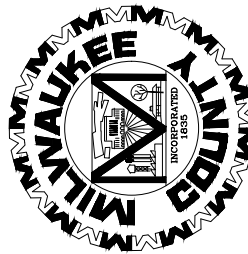
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NORTH REVTMENT CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

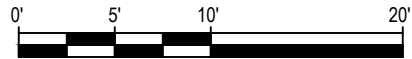
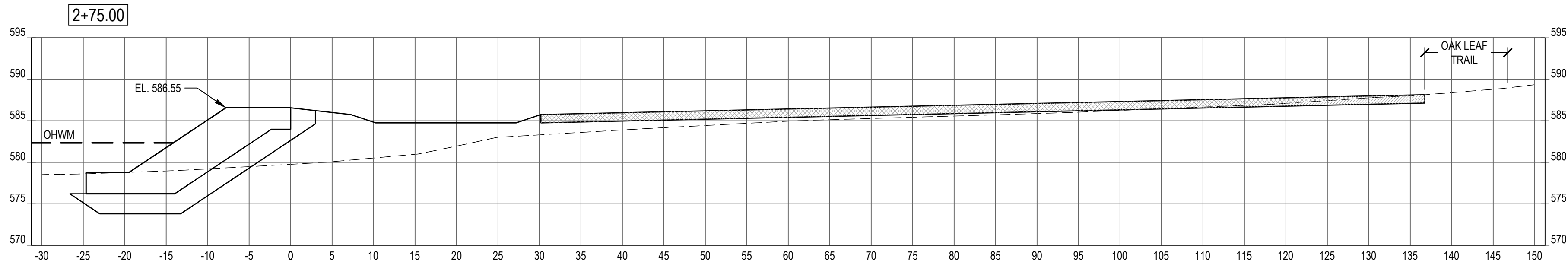
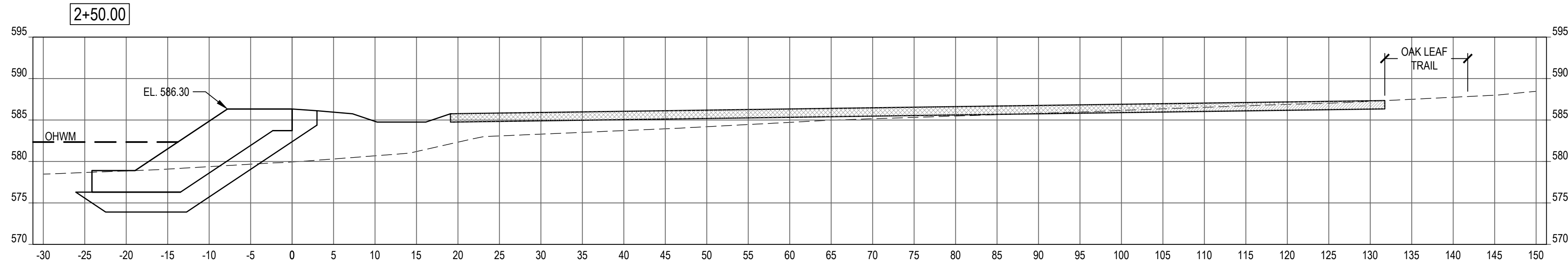
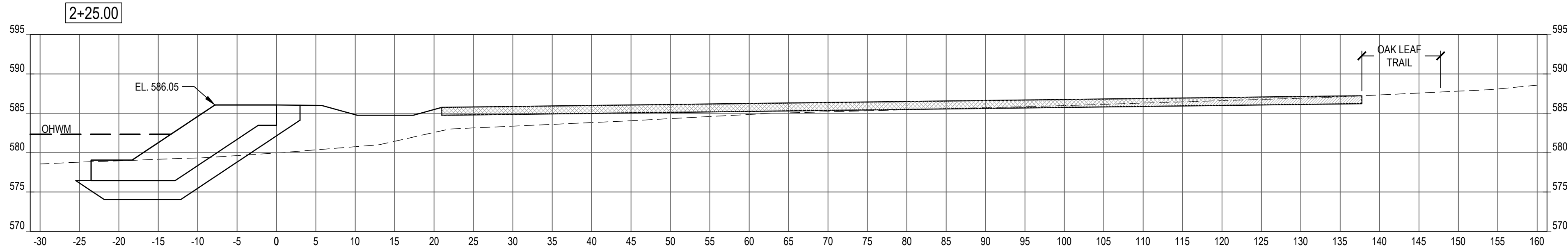
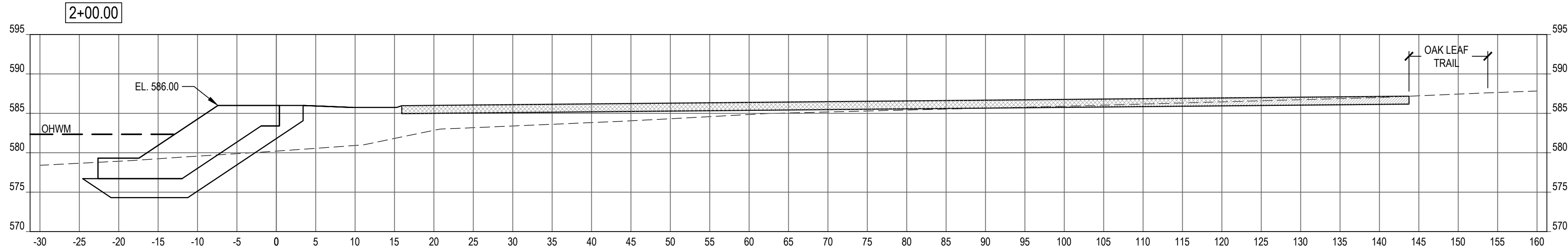
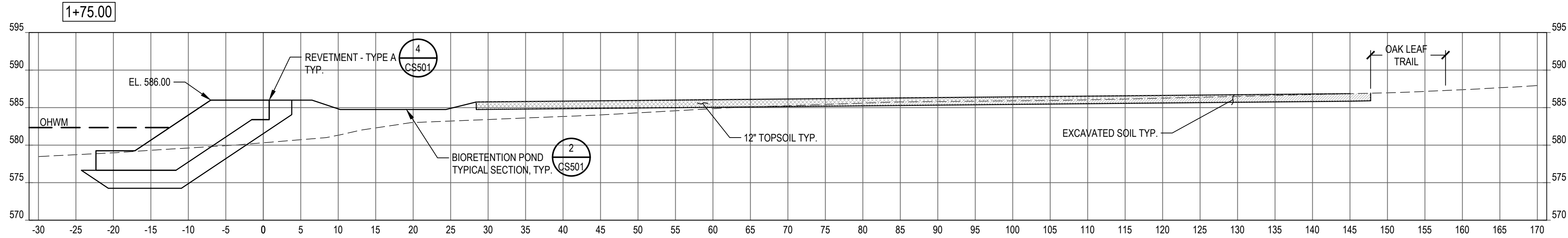


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633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG101

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SEALS AND SIGNATURES

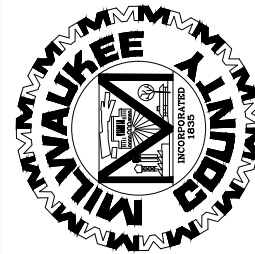
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NORTH REVETMENT CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
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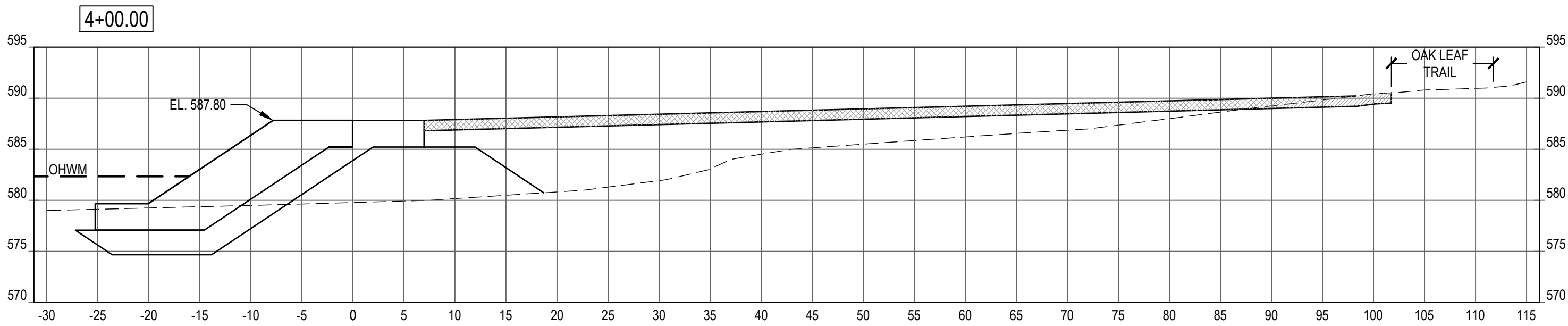
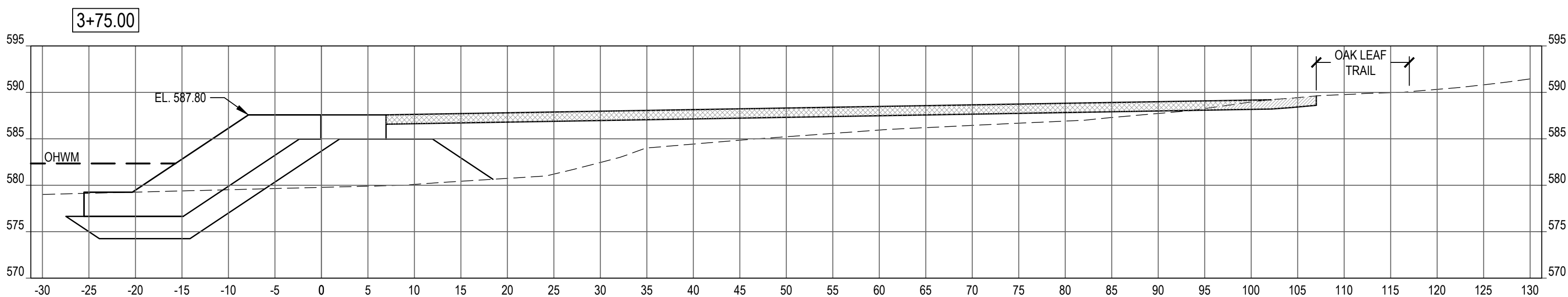
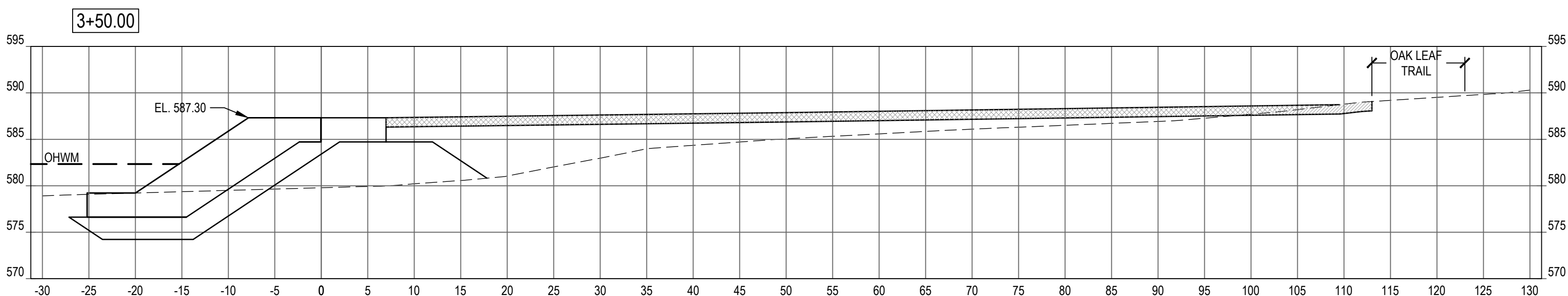
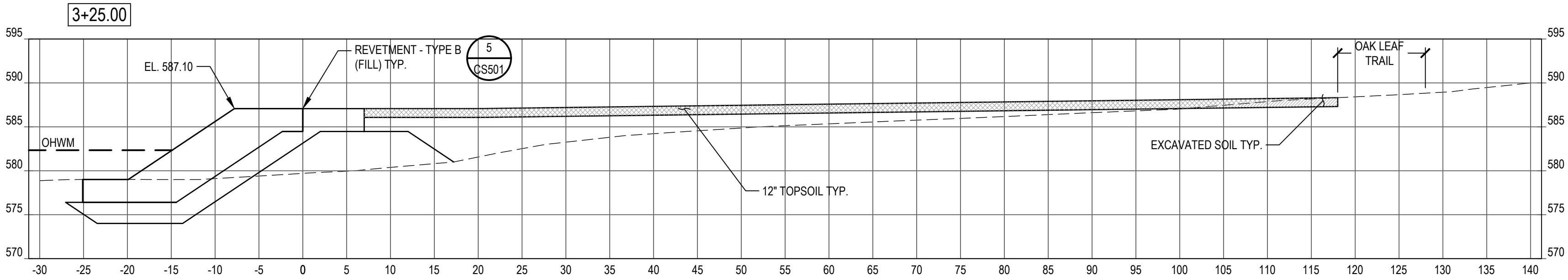
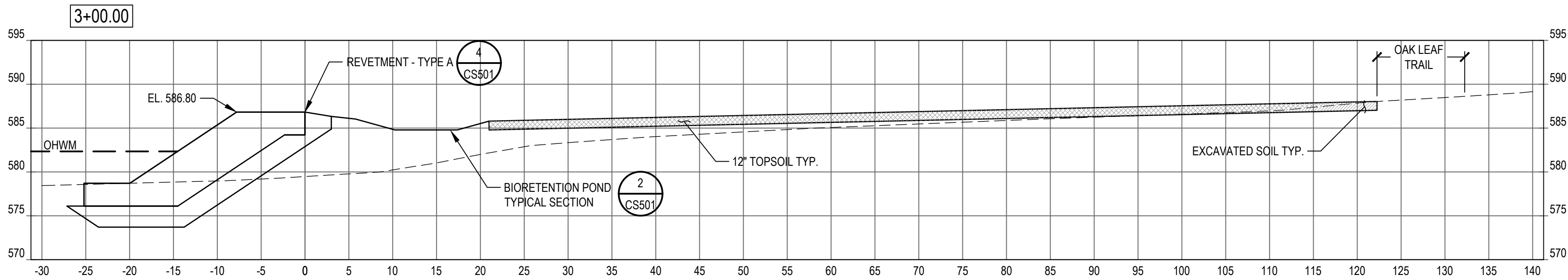


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DATE:
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PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG102

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SEALS AND SIGNATURES

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NORTH REVETMENT CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

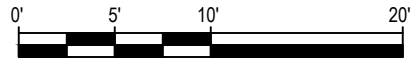
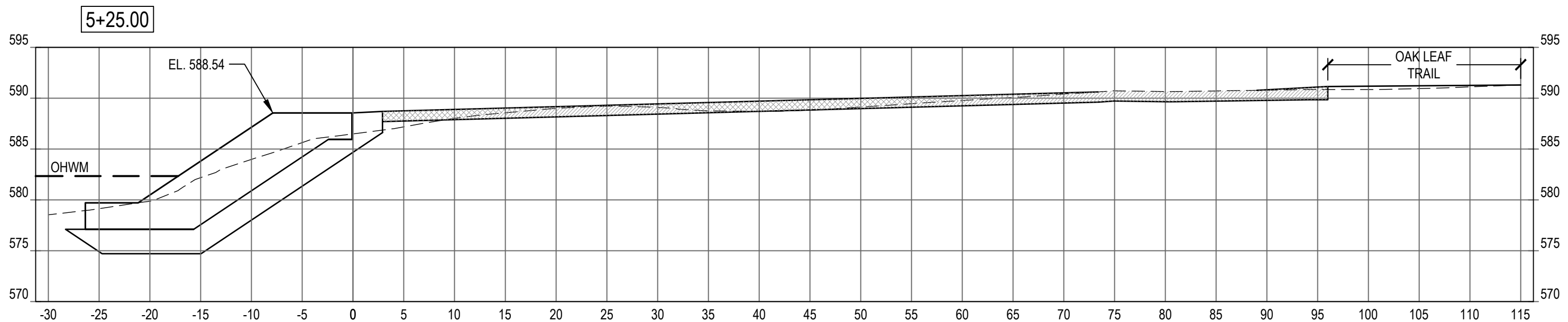
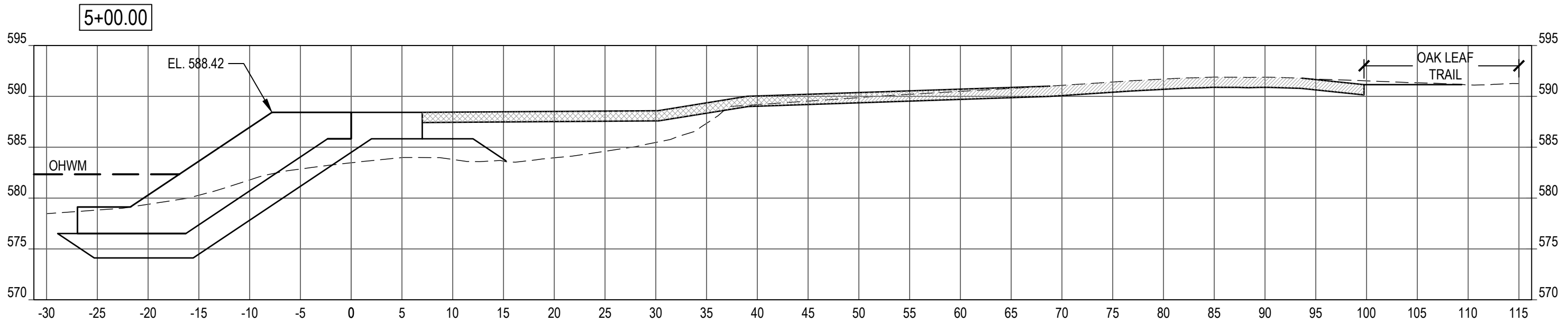
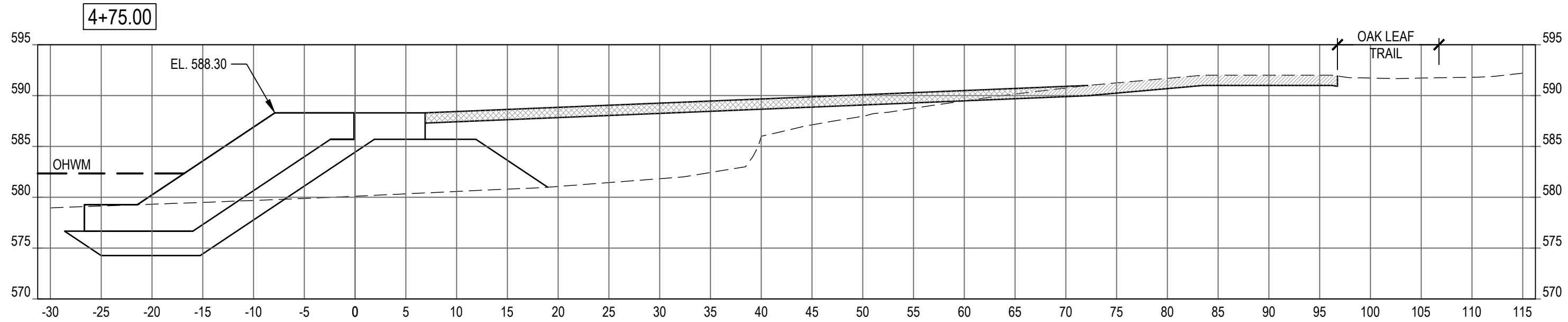
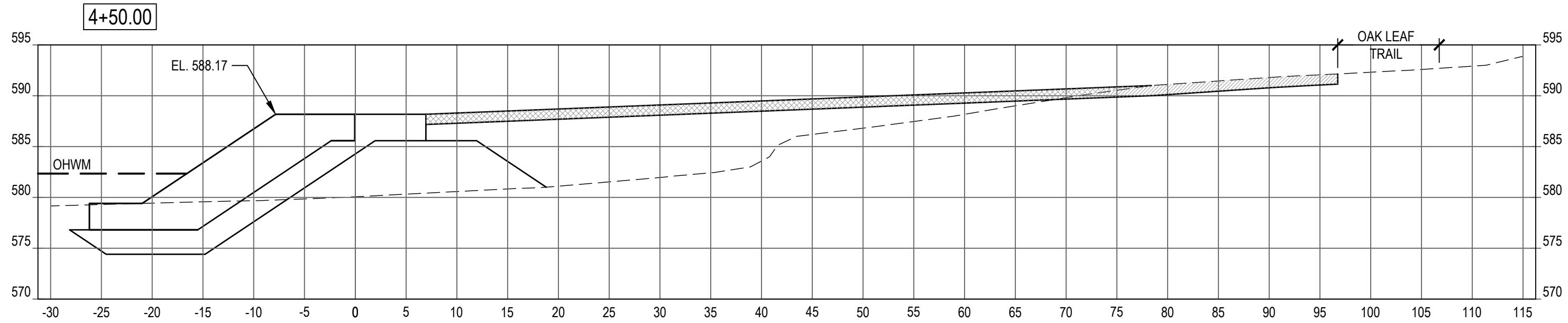
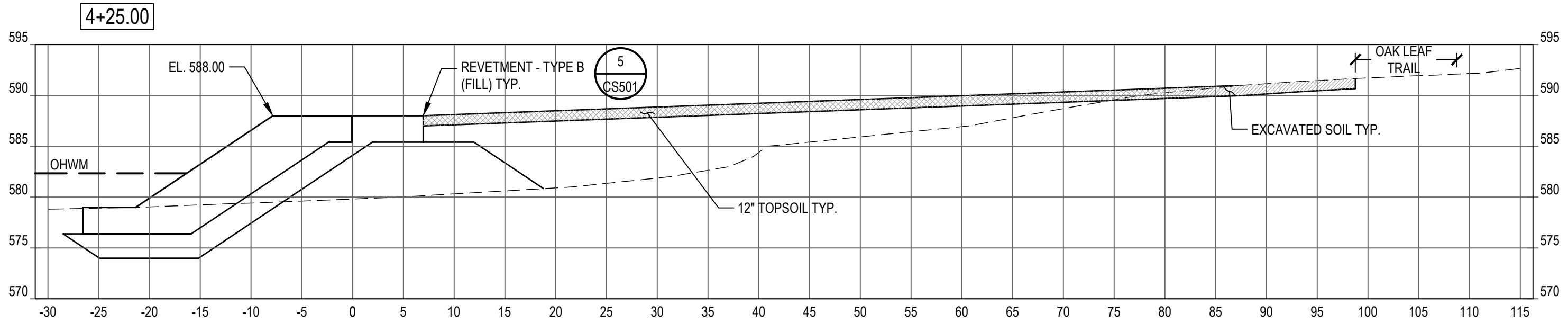


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DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG103

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SEALS AND SIGNATURES

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NORTH REVETMENT CROSS
SECTIONS

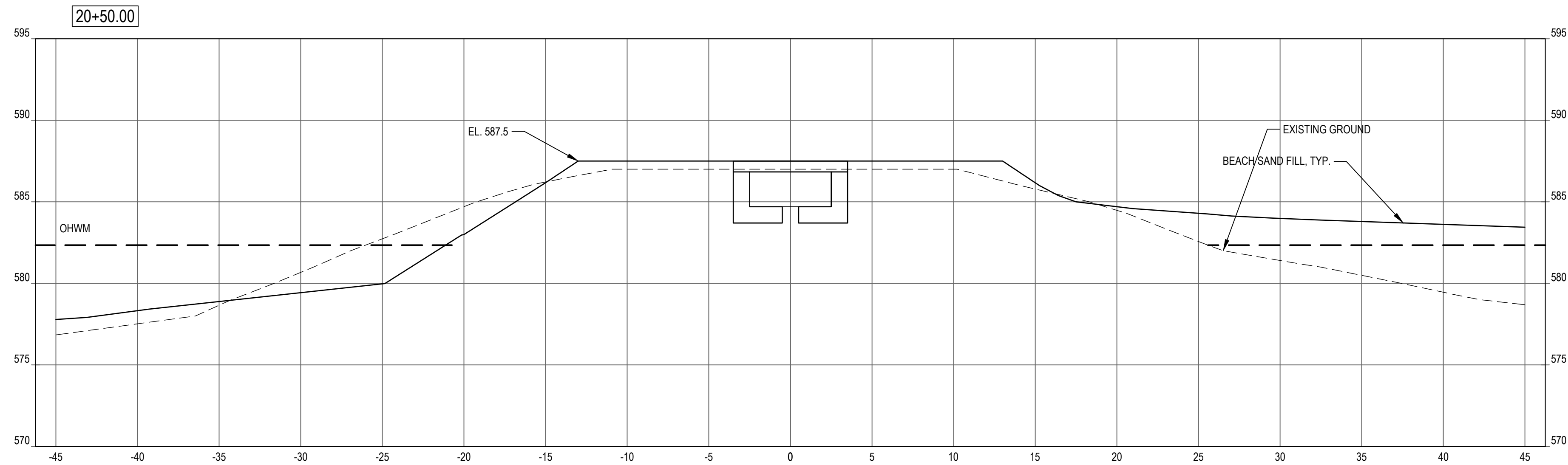
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207



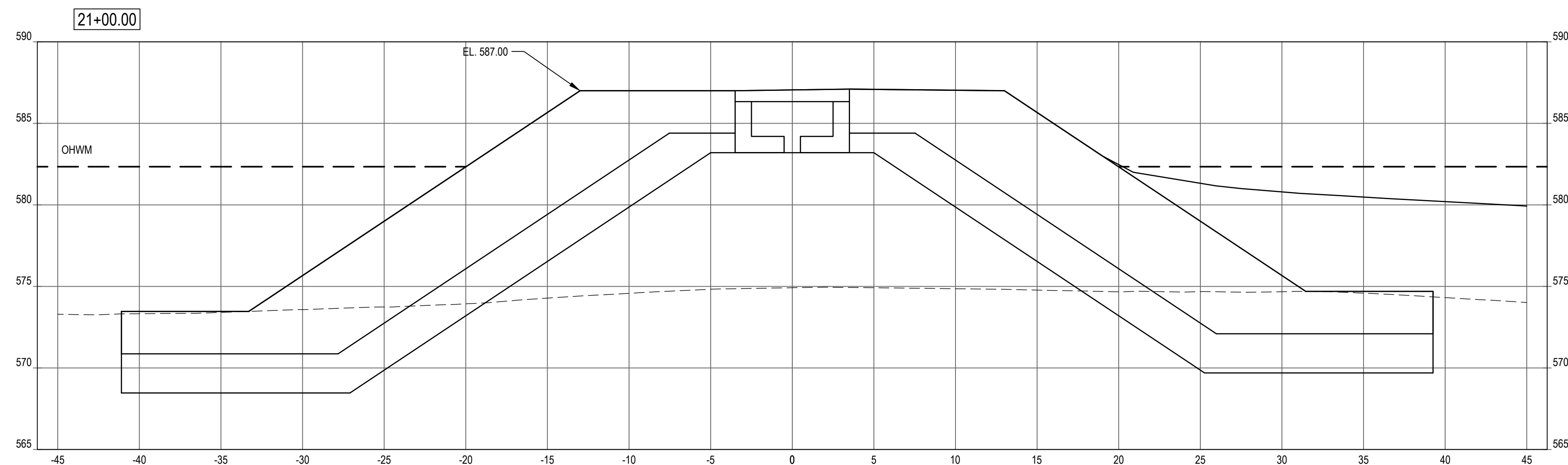
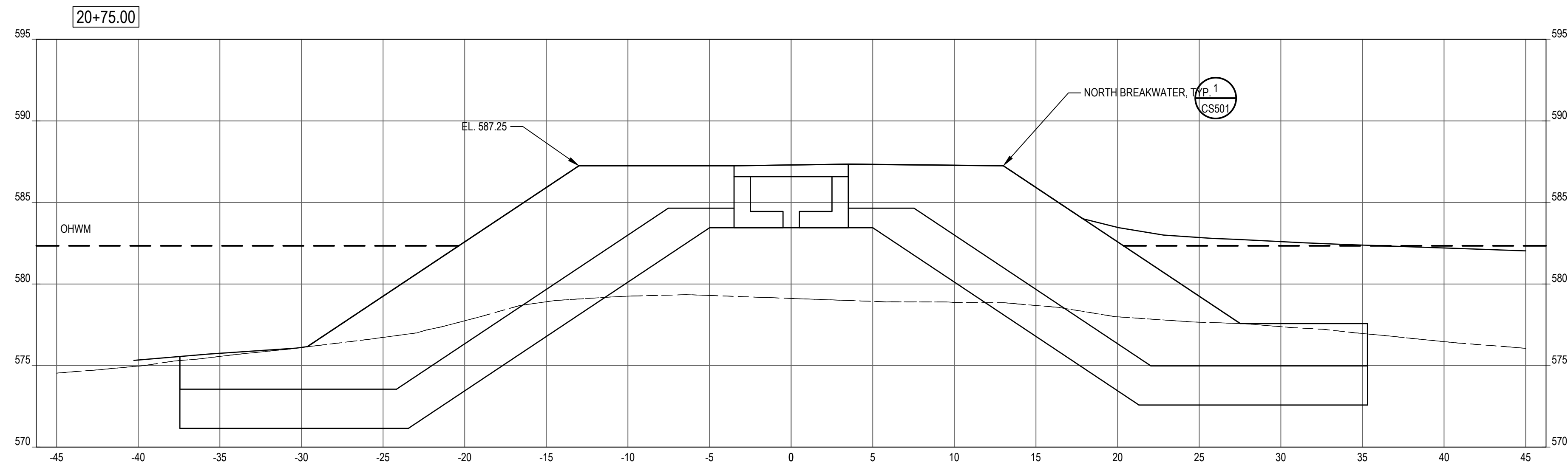
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering, & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG104



NOTE:
SEE  FOR NORTH BREAKWATER MATERIALS.



SEALS AND SIGNATURES

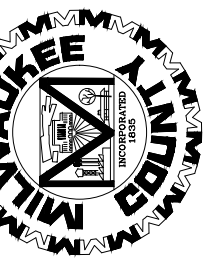
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MADISON, WI 53703
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NORTH BREAKWATER
CROSS SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207



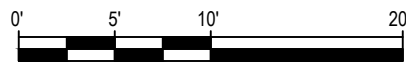
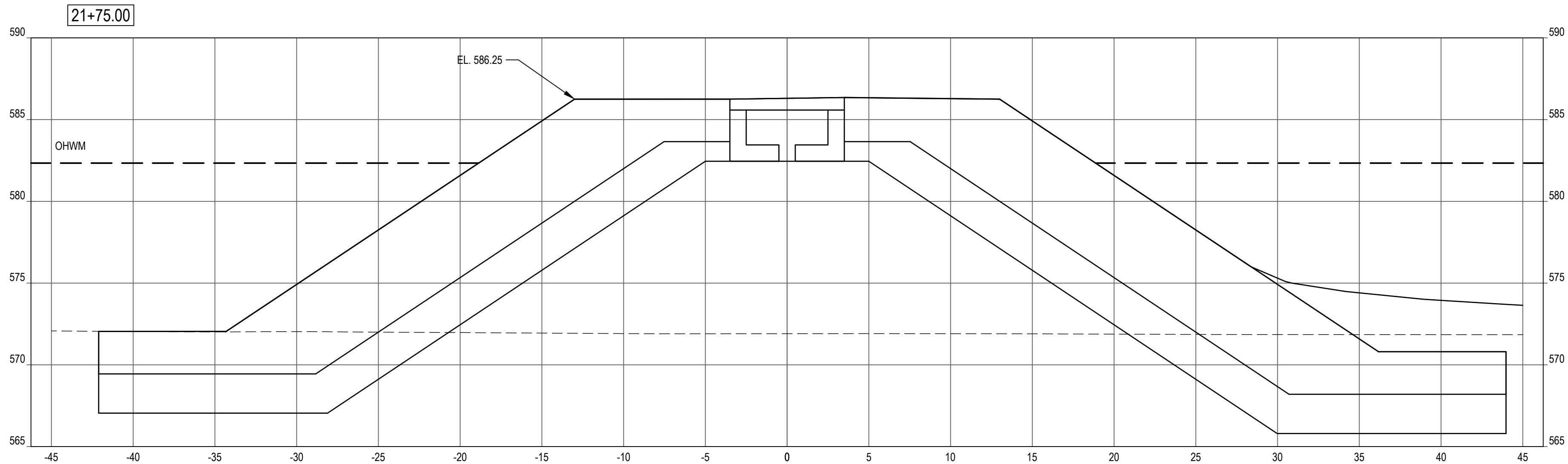
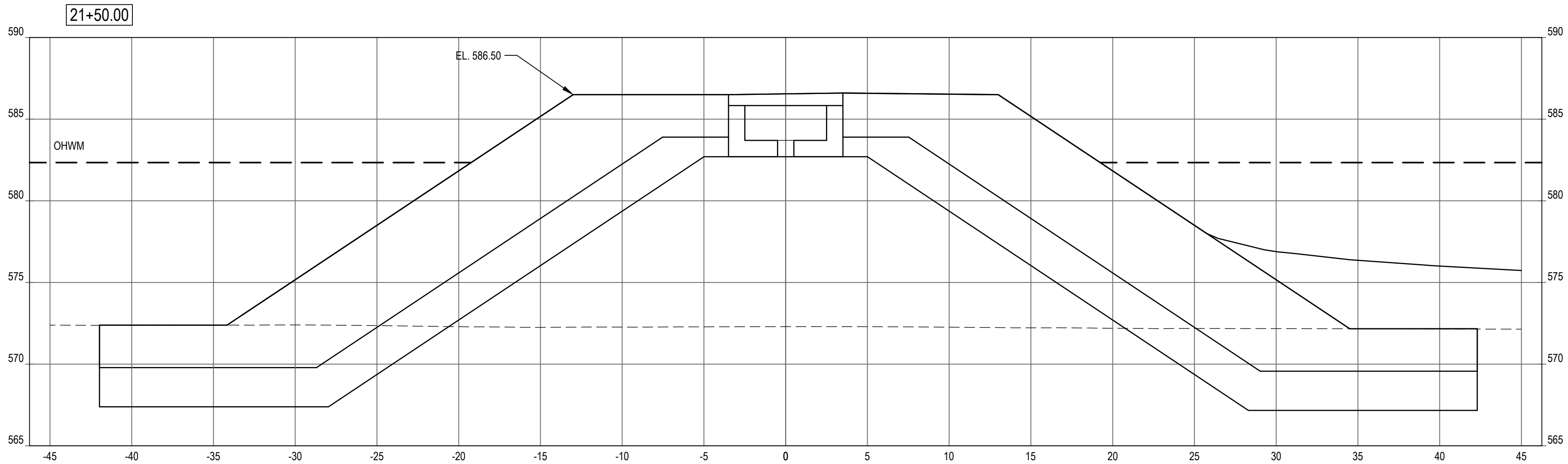
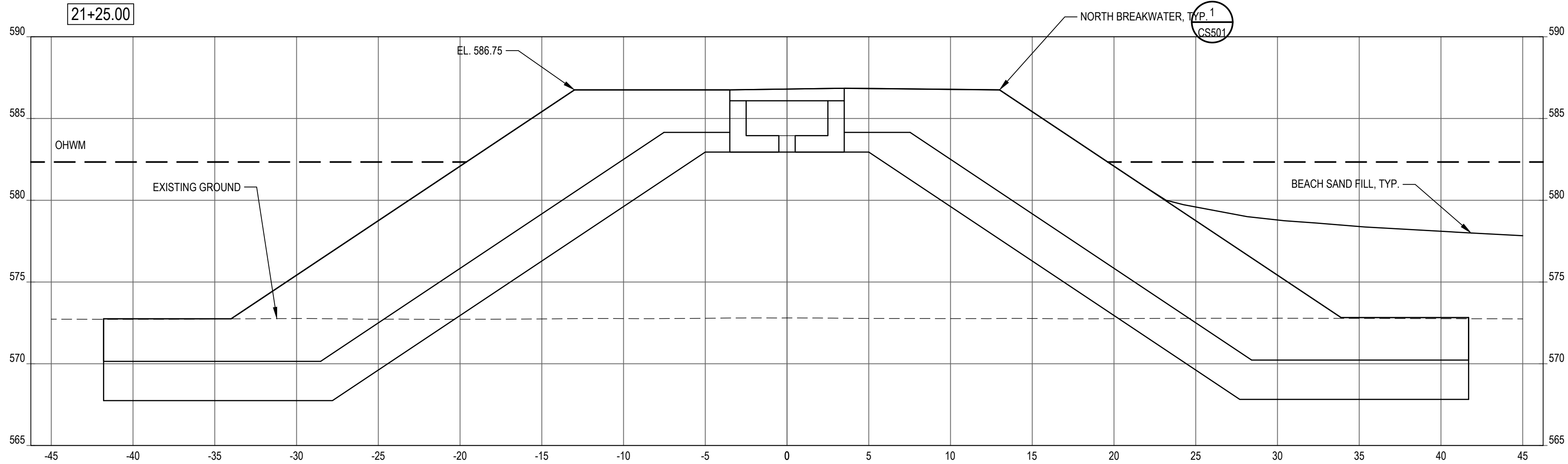
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
/13/2019
PROJECT:
60-17630
SITE NO:
639
BUILDING NO:

CG105

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NORTH BREAKWATER
CROSS SECTIONS



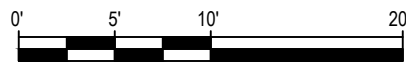
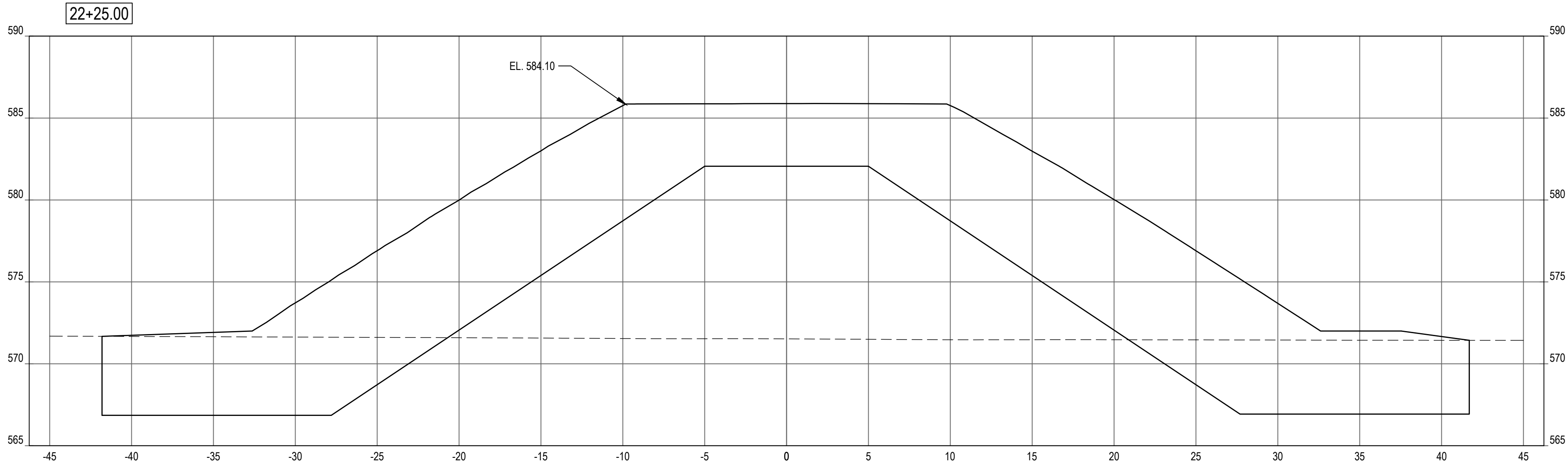
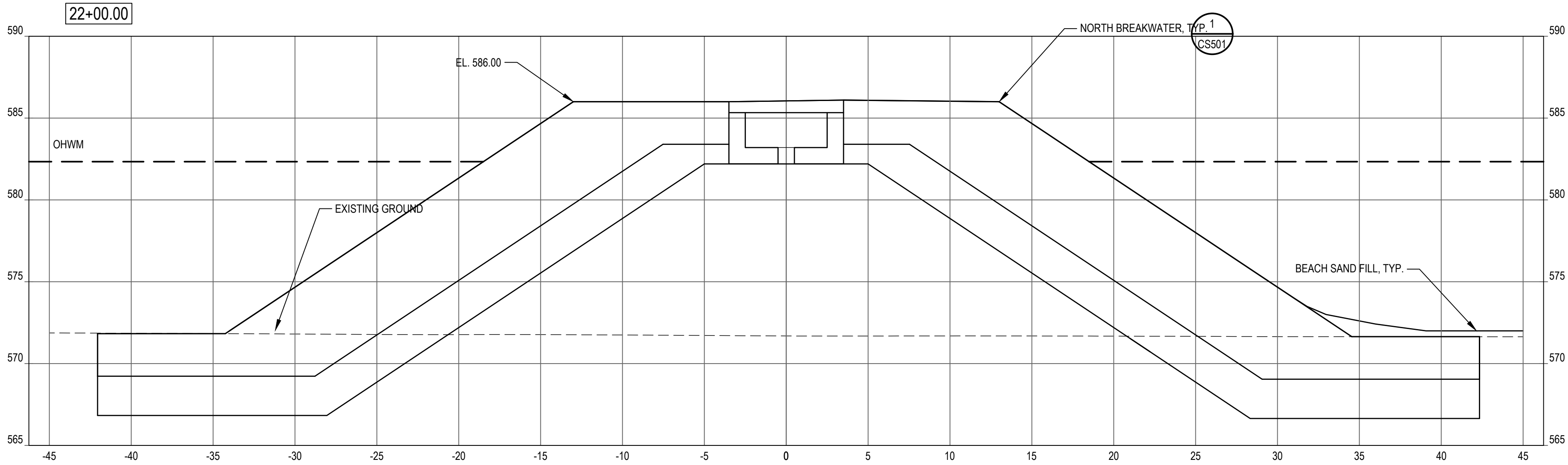
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG106

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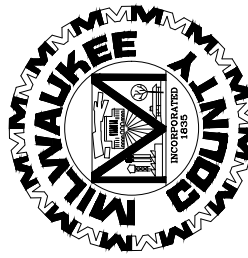
SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

SMITHGROUP

44 EAST MIFFLIN STREET
SUITE 500
MADISON, WI 53703
608.251.1177
www.smithgroup.com

NORTH BREAKWATER
CROSS SECTIONS



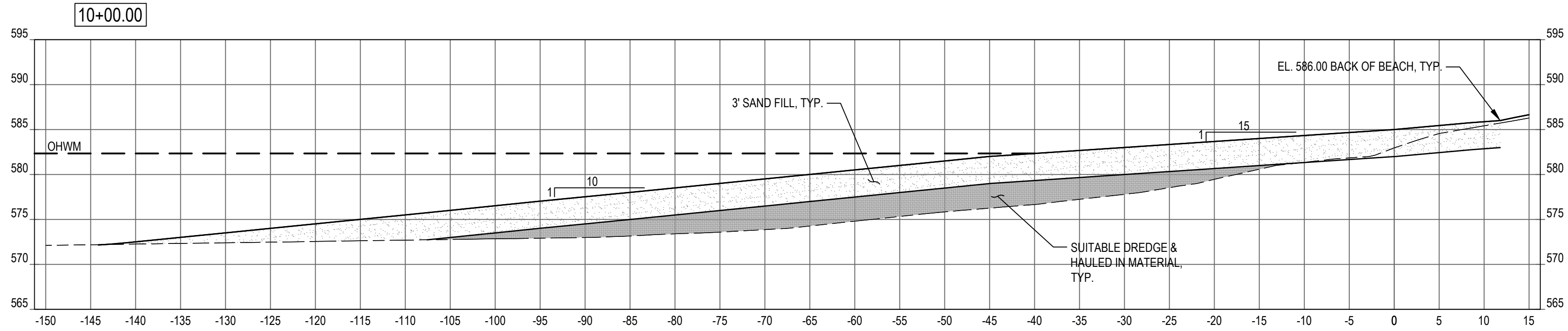
Milwaukee County Dept. of Administrative Services
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Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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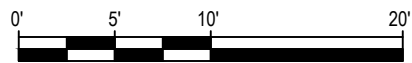
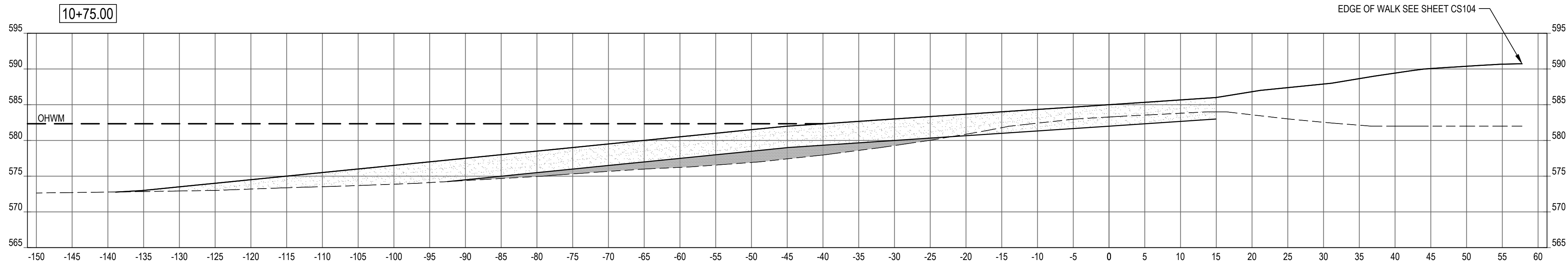
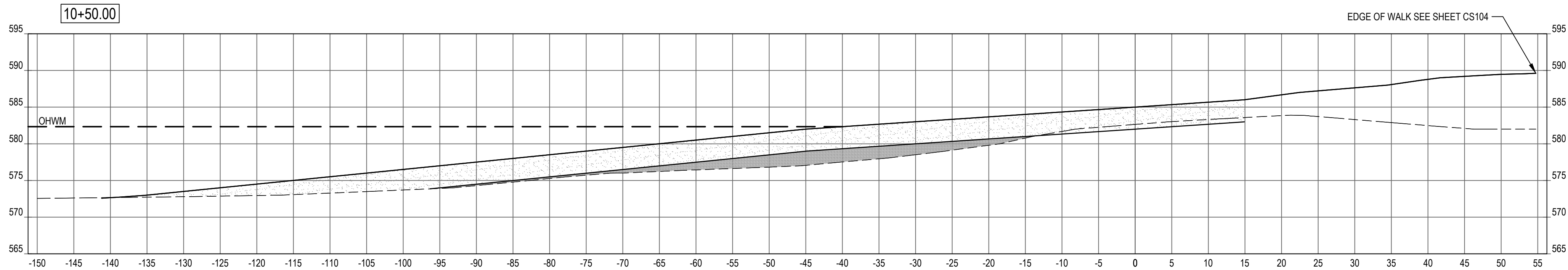
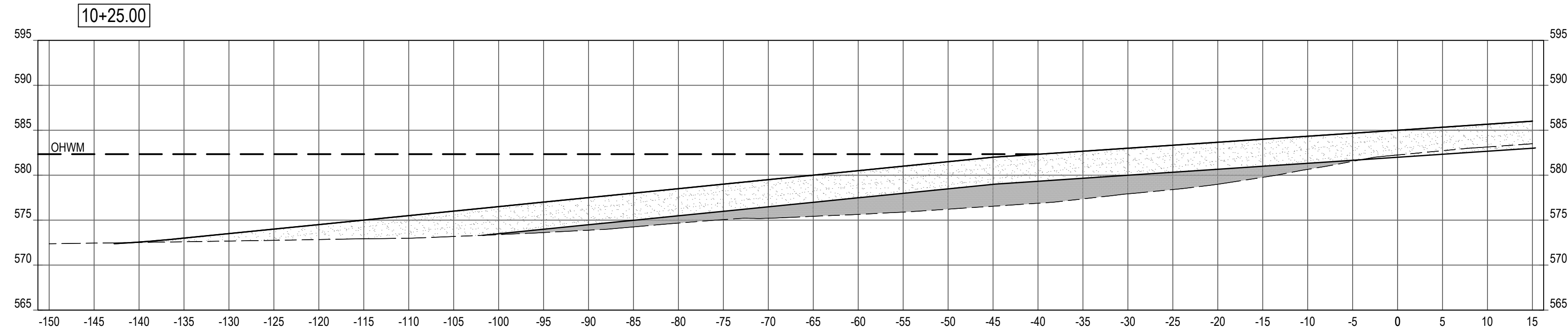
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG107

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NOTE:
SEE CS502 FOR BEACH AND REVETMENT.



SEALS AND SIGNATURES

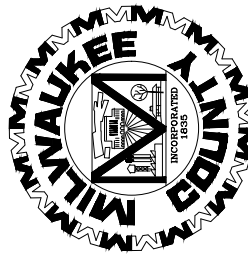
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SWIMMING BEACH CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

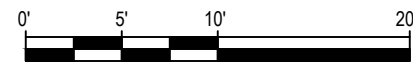
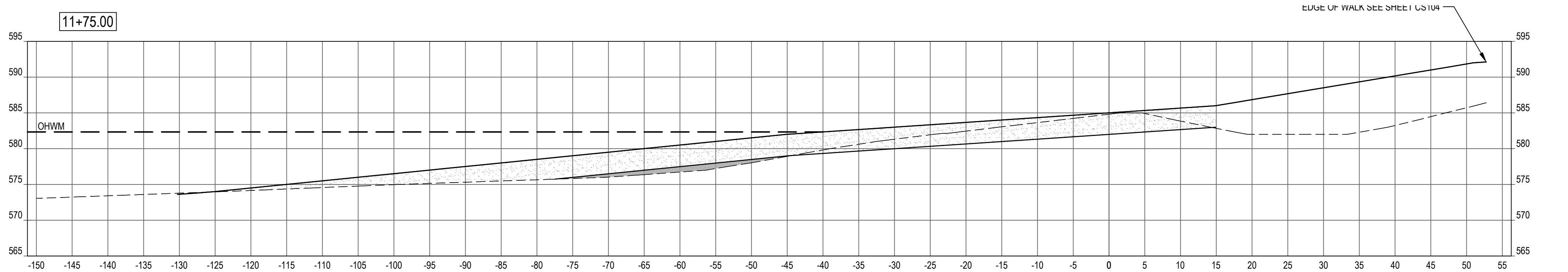
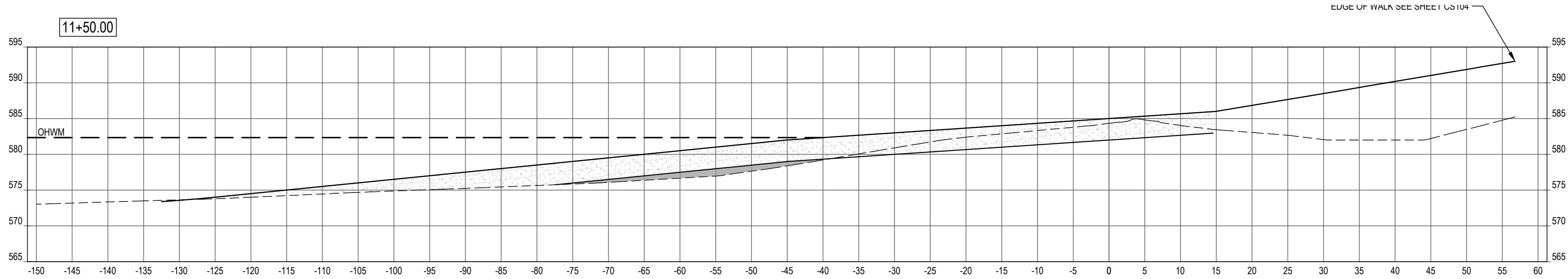
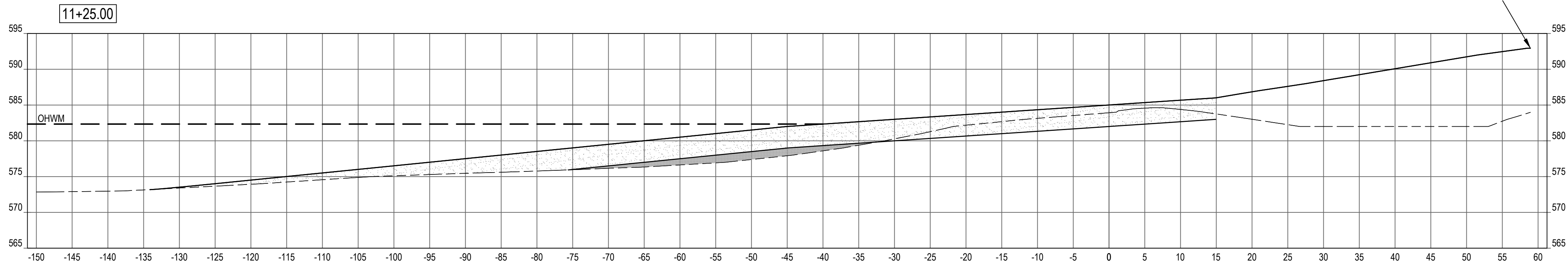
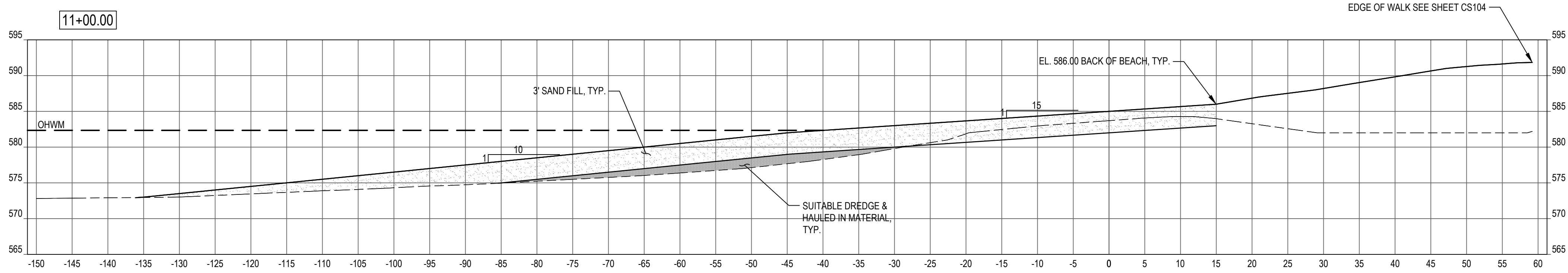


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Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG108

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SWIMMING BEACH CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

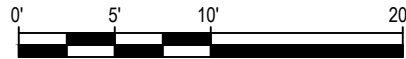
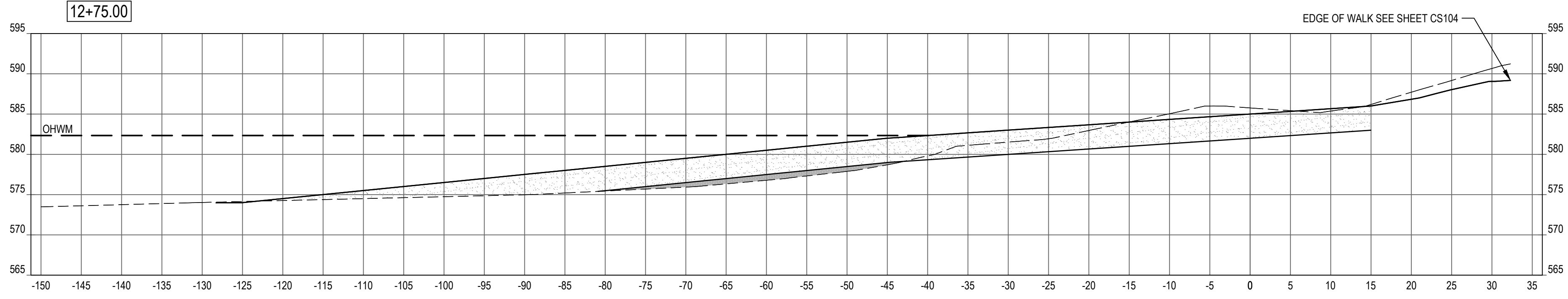
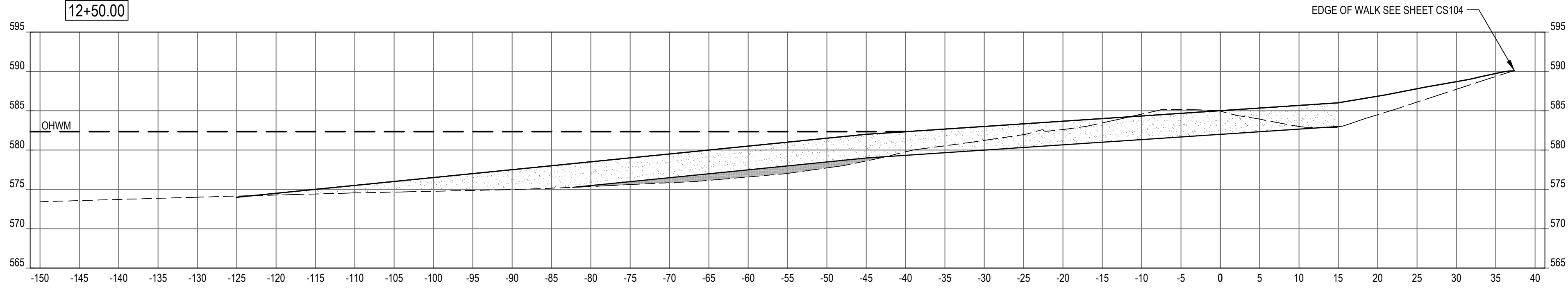
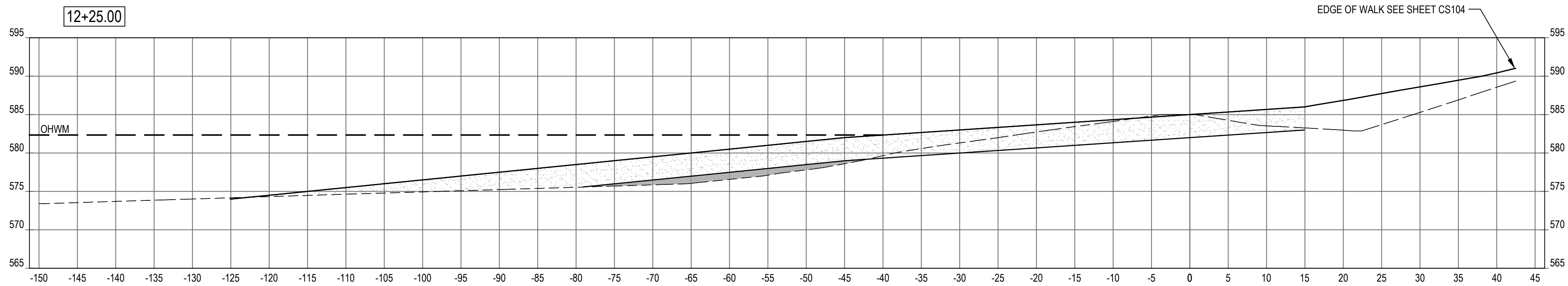
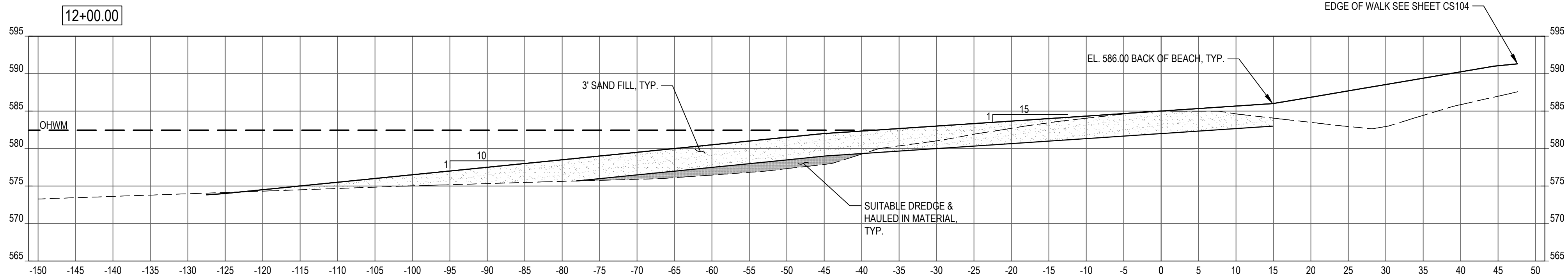


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Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG109

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SEALS AND SIGNATURES

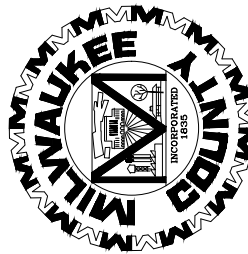
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SWIMMING BEACH CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

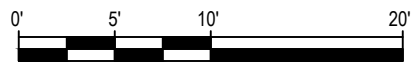
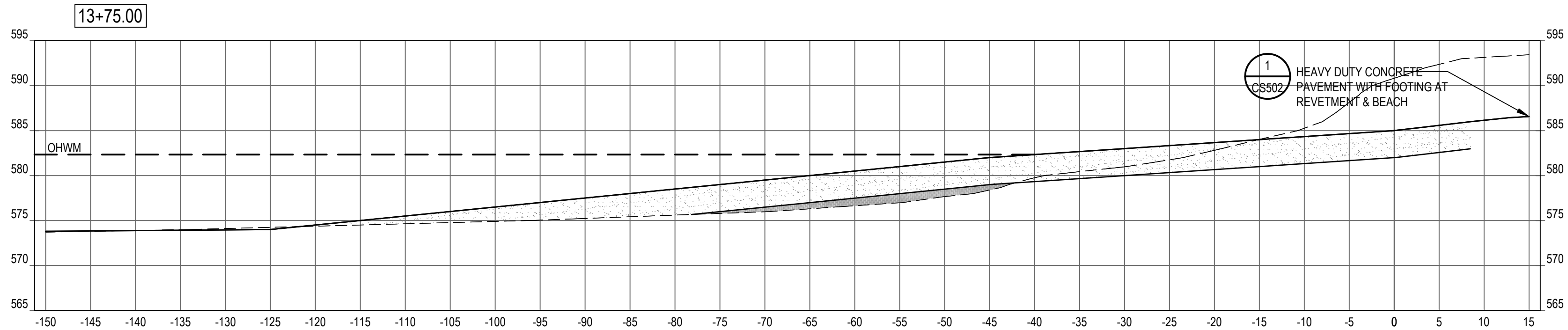
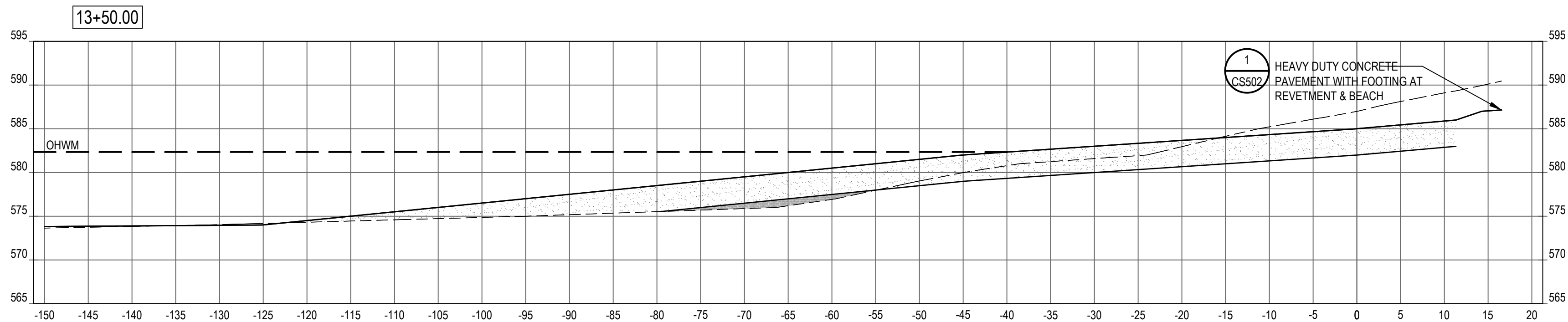
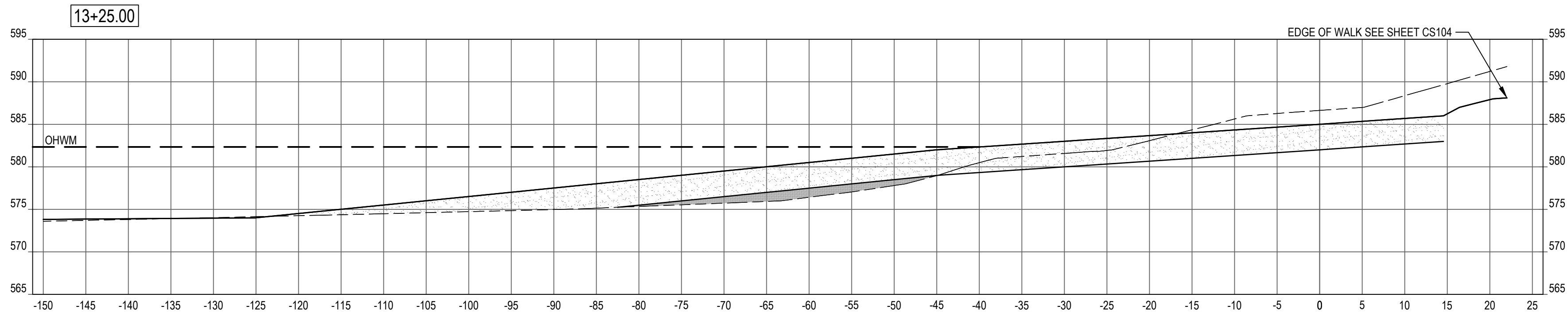
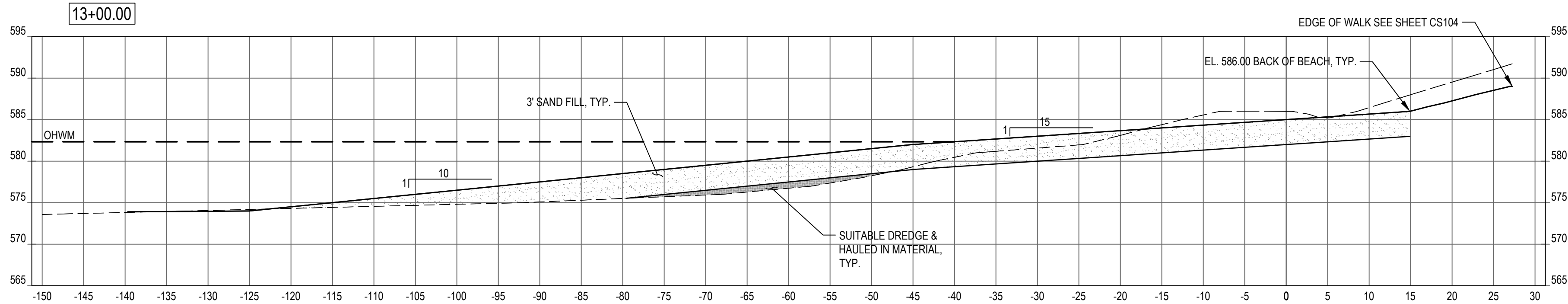


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633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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P560-17630
SITE NO:
639
BUILDING NO:

CG110

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SEALS AND SIGNATURES

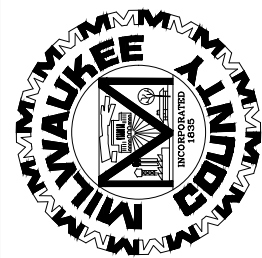
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SWIMMING BEACH CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

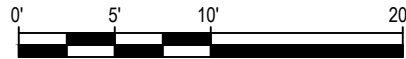
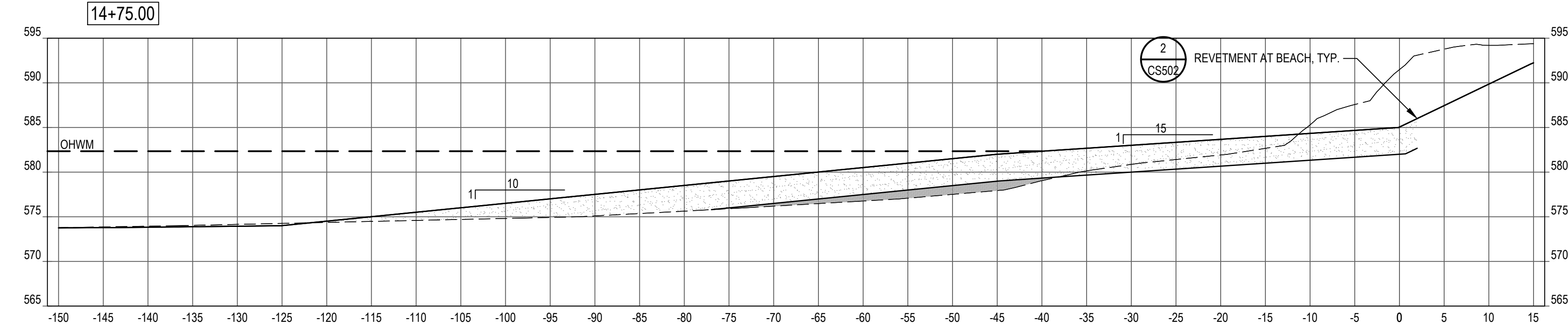
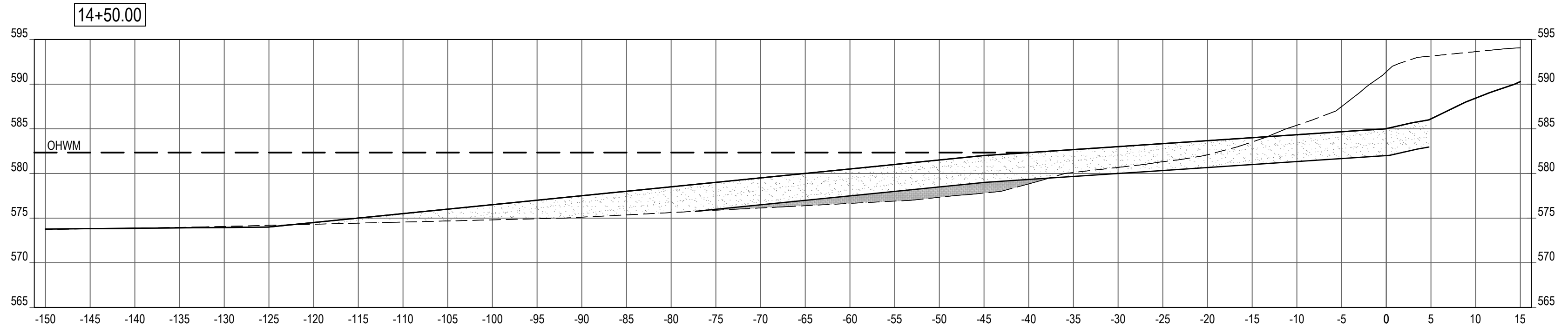
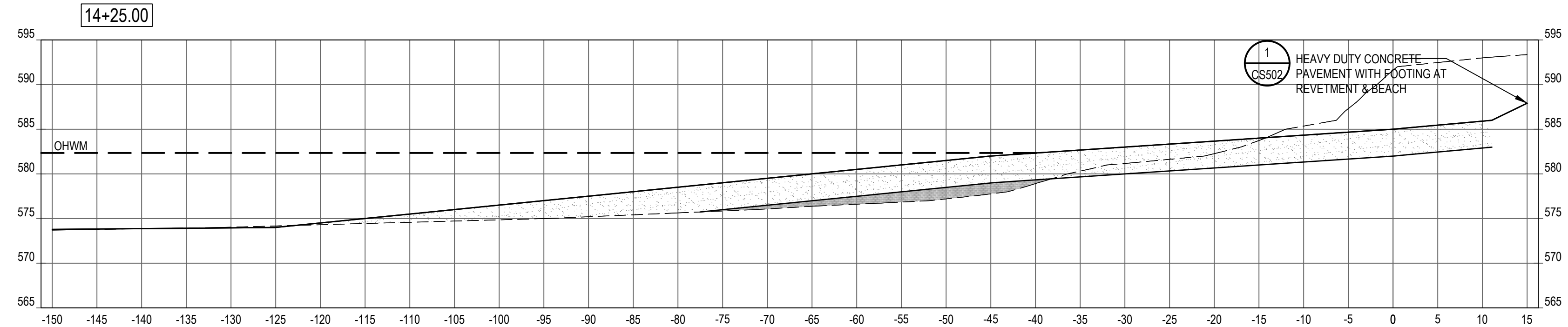
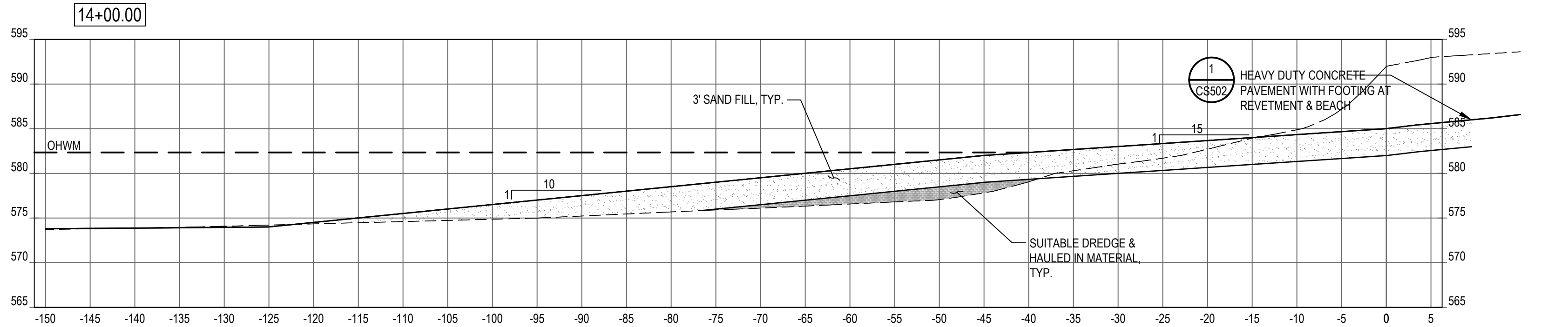


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DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

CG111

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SEALS AND SIGNATURES

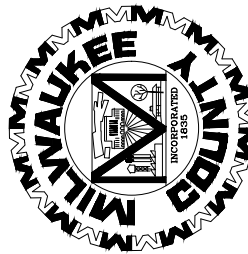
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SWIMMING BEACH CROSS
SECTIONS

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

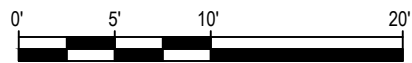
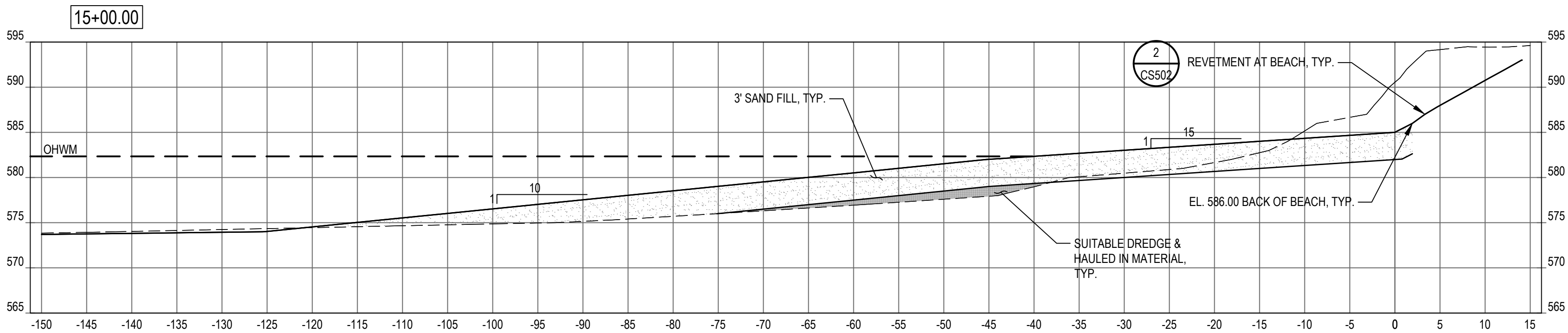


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FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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P560-17630
SITE NO:
639
BUILDING NO:

CG112

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SEALS AND SIGNATURES

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SWIMMING BEACH CROSS
SECTIONS



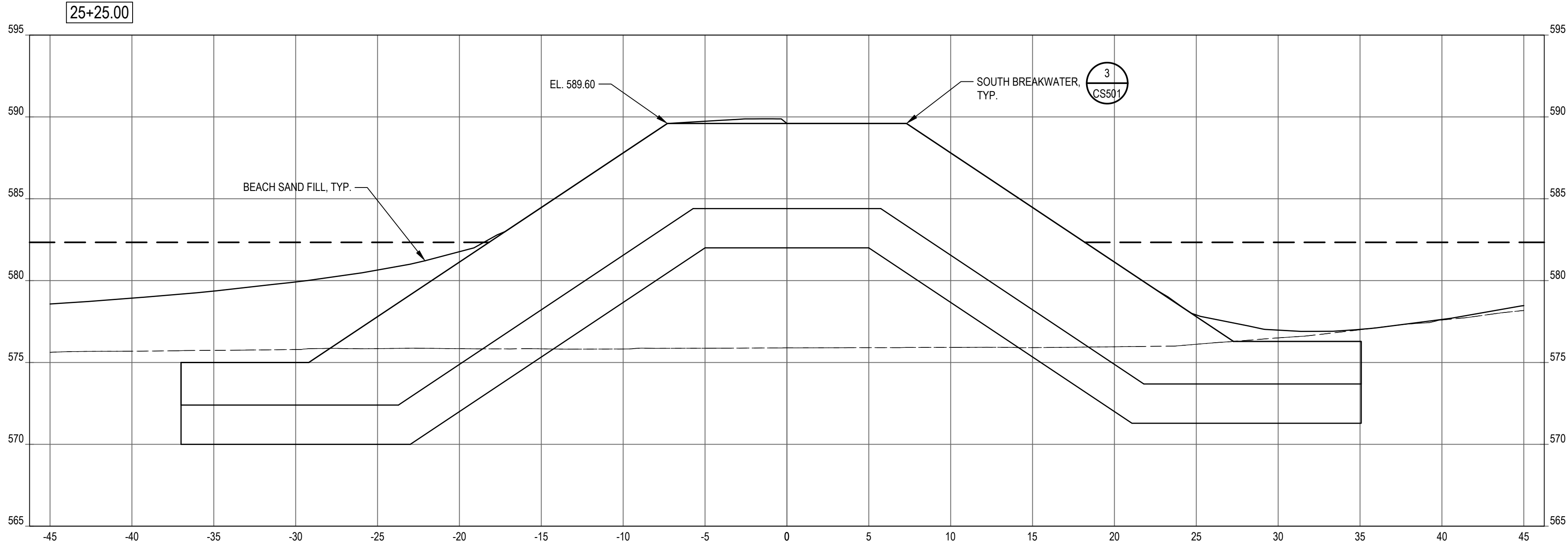
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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P560-17630
SITE NO:
639
BUILDING NO:

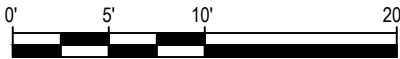
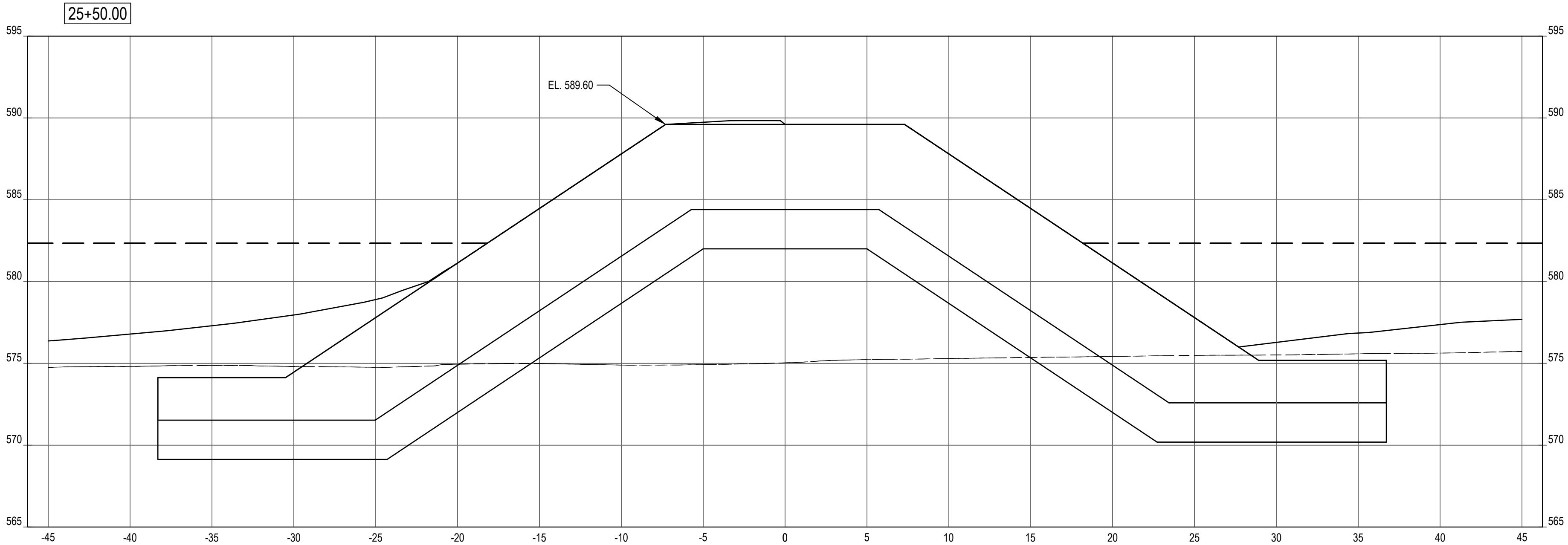
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG113

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NOTE:
SEE 3
CS501 FOR SOUTH BREAKWATER MATERIALS.



SEALS AND SIGNATURES

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SOUTH BREAKWATER
CROSS SECTIONS



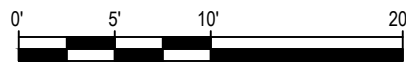
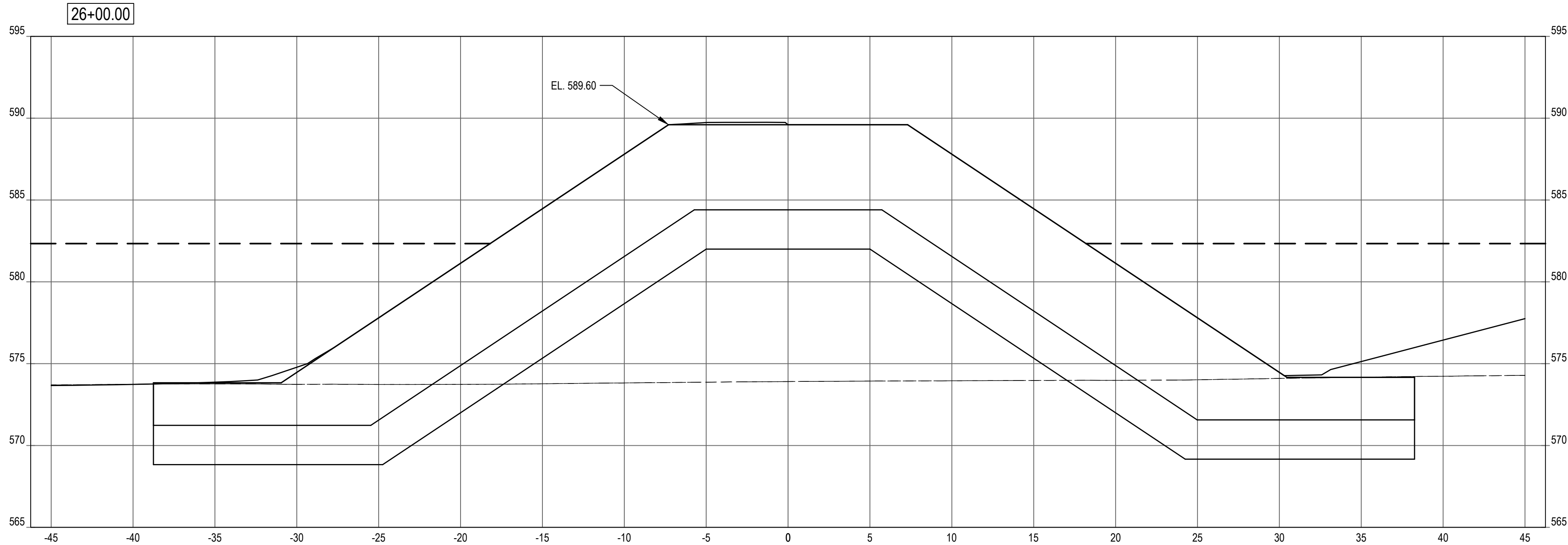
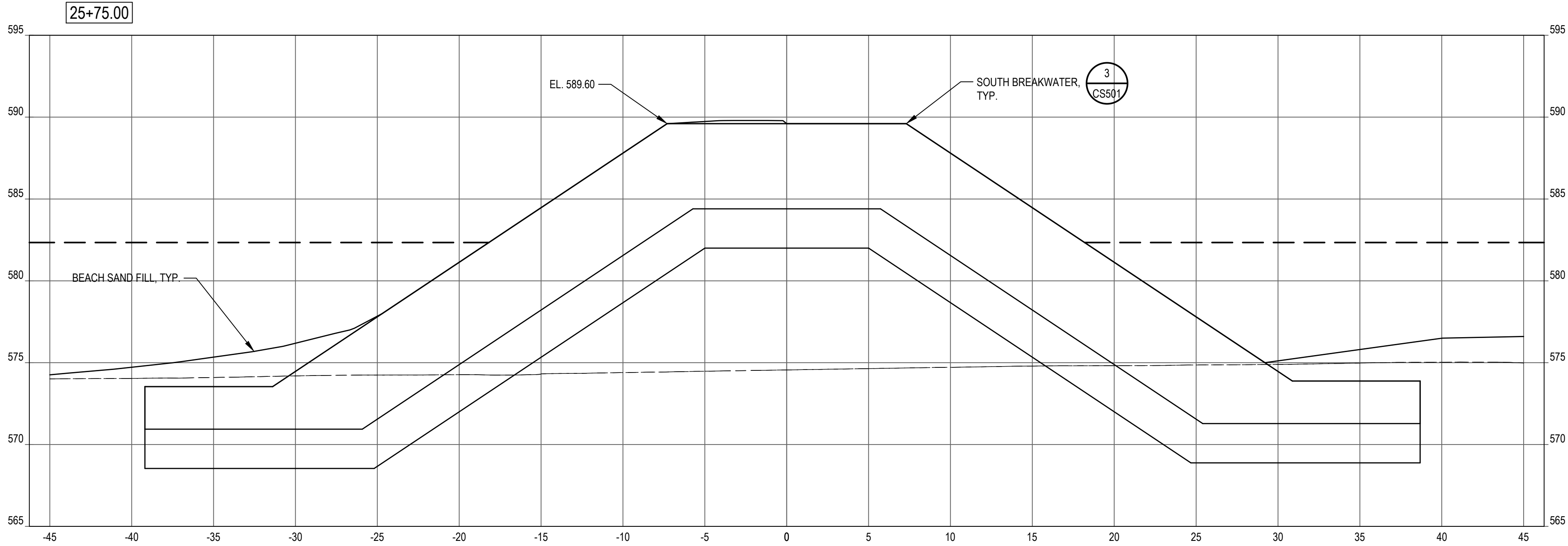
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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639
BUILDING NO:

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG114

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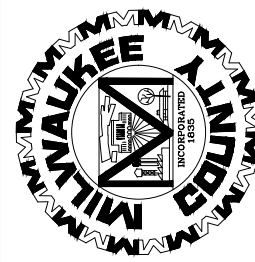
SEALS AND SIGNATURES

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SOUTH BREAKWATER
CROSS SECTIONS



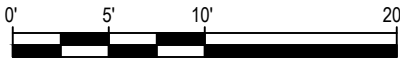
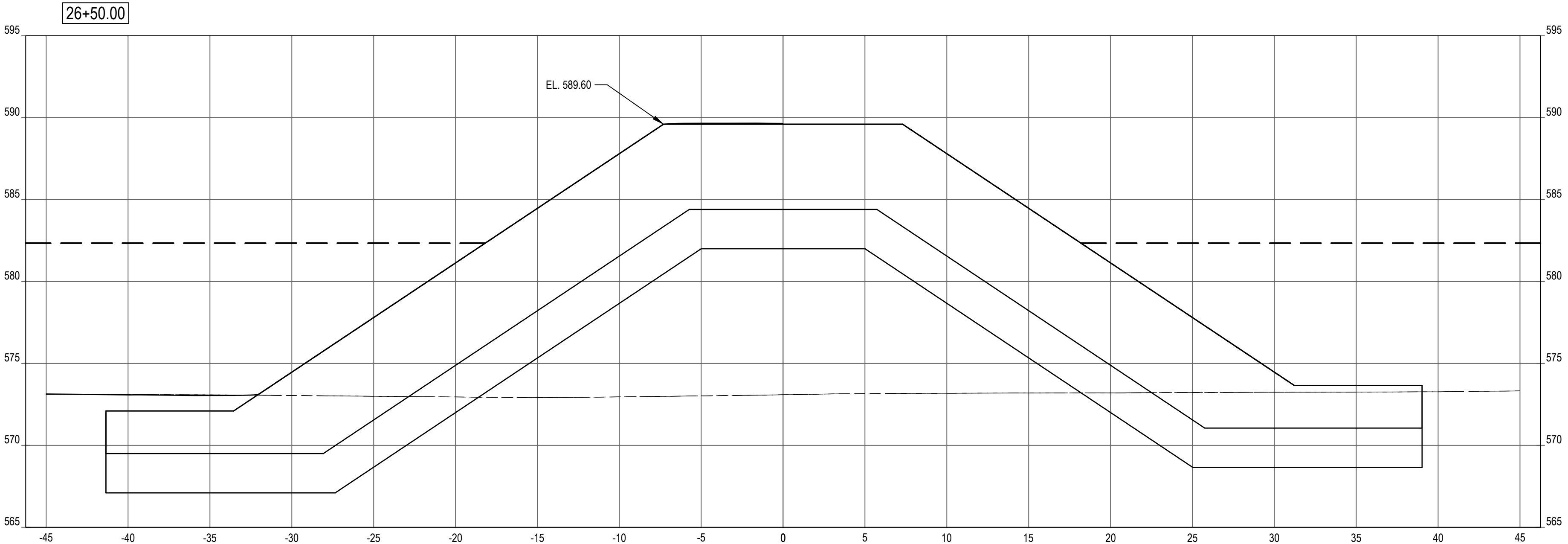
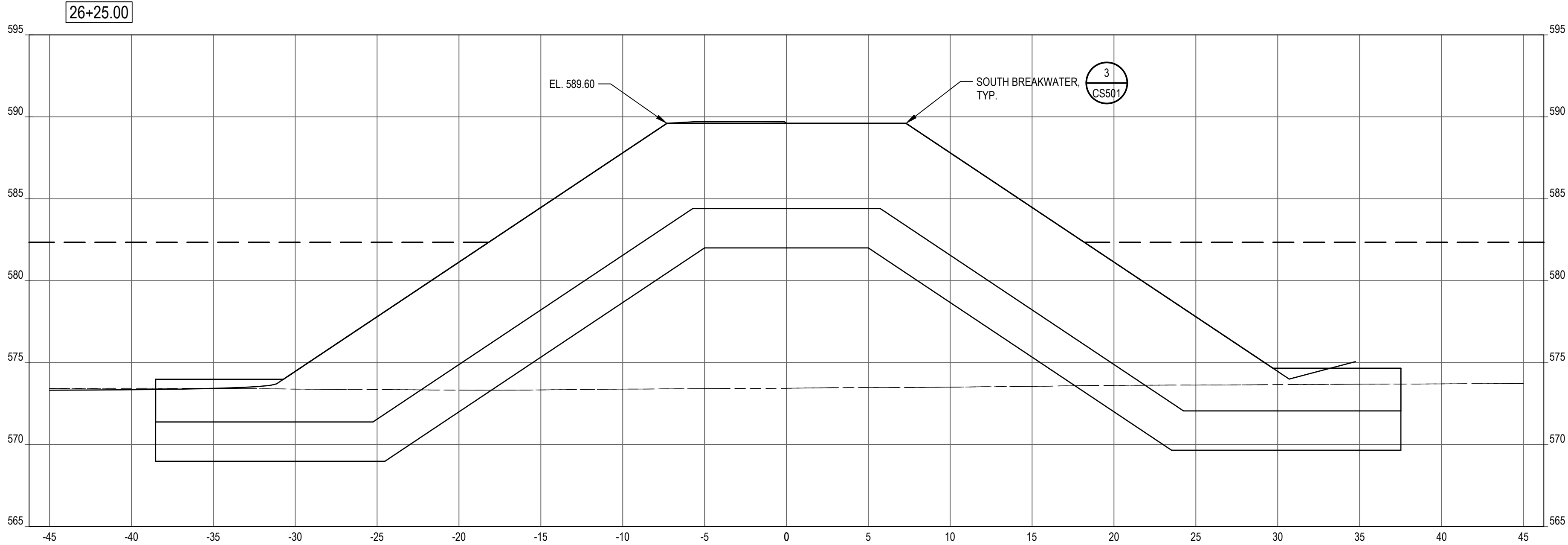
Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

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639
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BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG115

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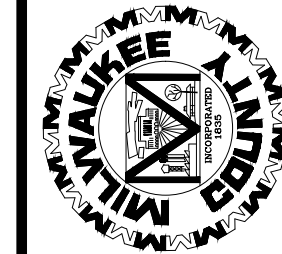
SEALS AND SIGNATURES

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SOUTH BREAKWATER
CROSS SECTIONS



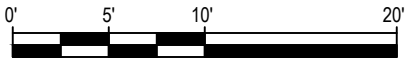
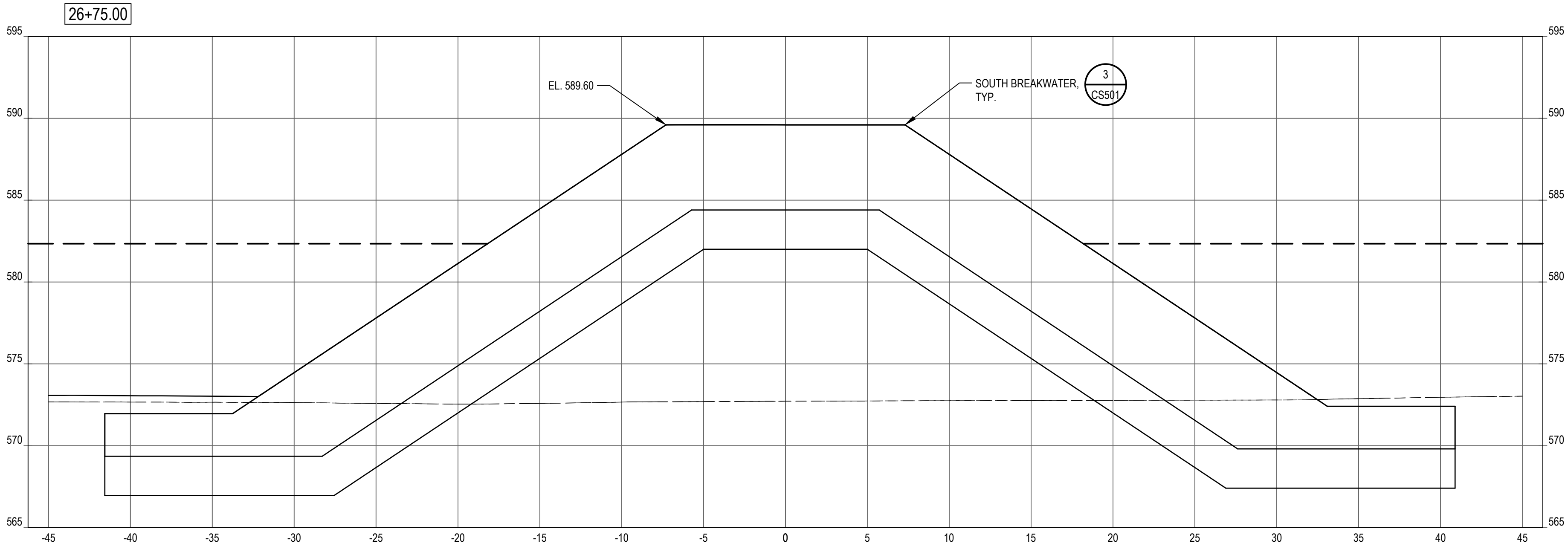
Milwaukee County Dept. of Administrative Services
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633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

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639
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BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG116

FILE:P:\10451.000\CAD\C\sheet\10451-CG101.dwg USER:alra DATE:Dec, 27 2019 TIME: 02:12 pm



SEALS AND SIGNATURES

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SOUTH BREAKWATER
CROSS SECTIONS

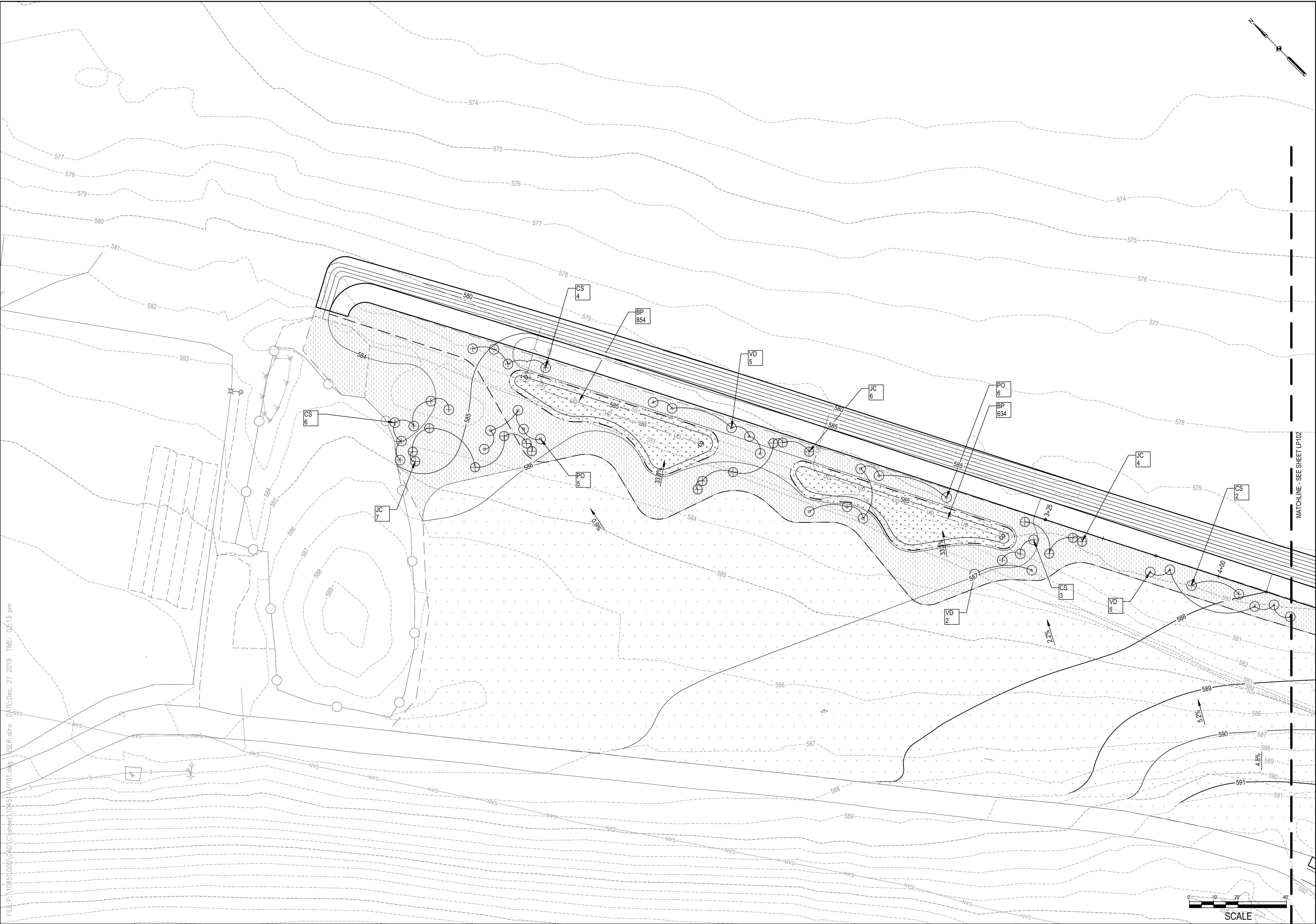


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Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
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639
BUILDING NO:

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

CG117



SHEET NOTES

1. SITE IS IN USDA PLANT HARDINESS ZONE 5B.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK UNDER THIS CONTRACT AND REQUEST THAT UNDERGROUND UTILITIES BE LOCATED IN ACCORDANCE WITH SECTION 182.0175(2) OF THE WISCONSIN STATUTES. ANY UTILITY LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY, AND OTHER UTILITIES MAY BE PRESENT.
3. SEEDING APPLIES TO ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES EVEN IF ACTIVITIES EXTEND BEYOND THE APPROXIMATED SEEDING LIMITS INDICATED ON THE DRAWINGS. REPAIR ANY DISTURBED AREAS TO THE SAME CONDITION AS ORIGINALLY FOUND AND TO THE OWNER'S SATISFACTION. REFER TO SPECIFICATIONS FOR SEED MIXES.
4. UTILIZE HORTICULTURAL TREE WATERING BAGS FOR TREES THROUGHOUT WARRANTY PERIOD. REPLENISH TREE WATERING BAGS REGULARLY SO THAT NONE REMAIN WITHOUT WATER FOR MORE THAN 24 HOURS.
5. SEE CE101-CE501 FOR EROSION CONTROL.

LEGEND

- EXISTING TREES
- EXISTING TREE LINE / WOODLAND EDGE
- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- DECIDUOUS & CONIFEROUS SHRUB
- LAWN SEED MIX
- LAWN SEED MIX. SHALL RECEIVE EROSION CONTROL BLANKET
- BIORETENTION SEED MIX AND PLUGS. SHALL RECEIVE EROSION CONTROL BLANKET
- NATIVE UPLAND SEED MIX. SHALL RECEIVE EROSION CONTROL BLANKET
- NATIVE UPLAND SEED MIX. SHALL RECEIVE TURF REINFORCEMENT MAT.

SEALS AND SIGNATURES

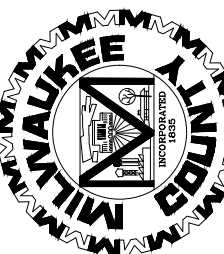
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PLANTING PLAN - AREA A

BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
2900 SOUTH SHORE DRIVE, MILWAUKEE, WI 53207

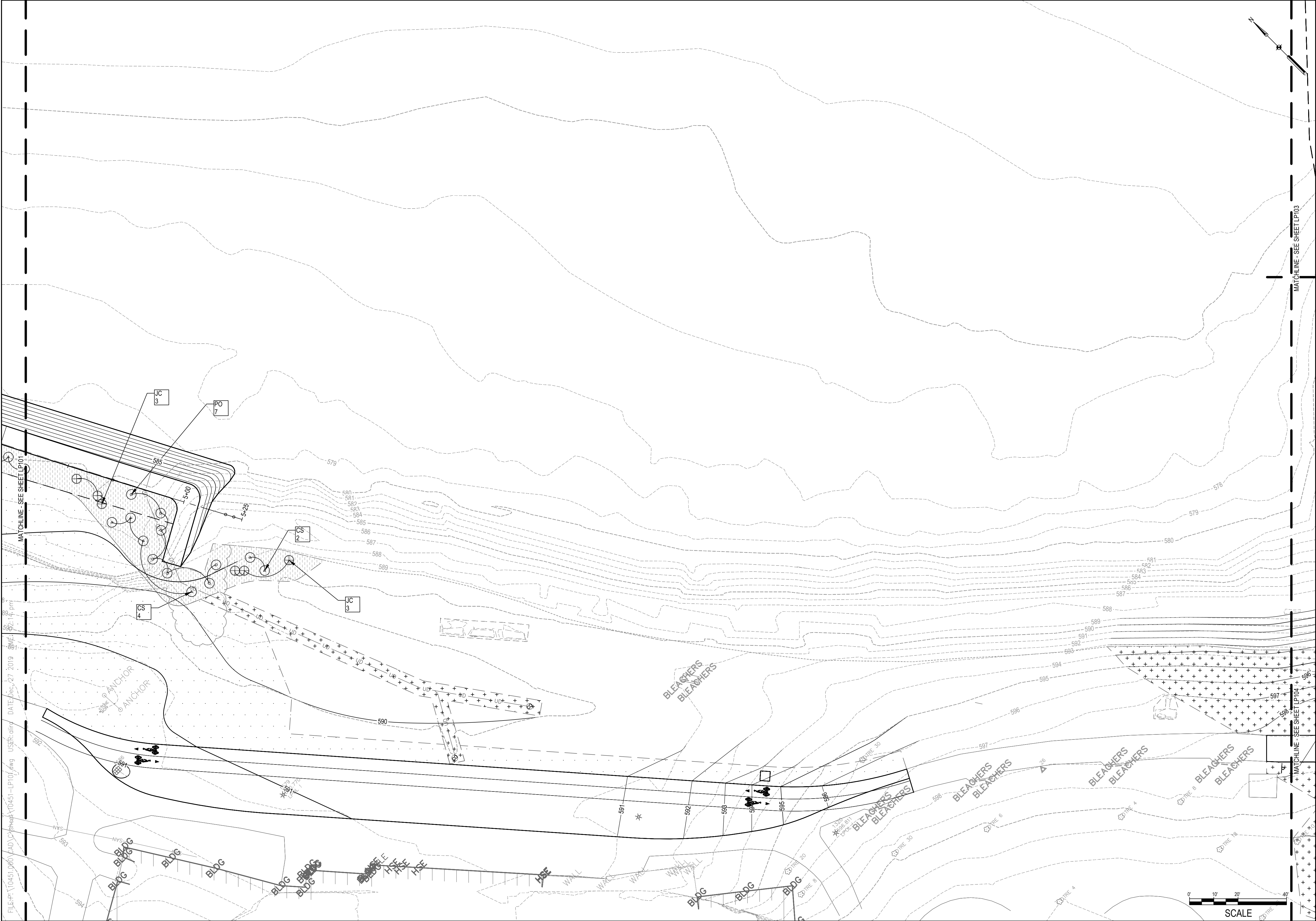


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PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

LP101

FILE: P:\10451\000\CAD\C\Sheet\10451 LP101.dwg USER: dila DATE: Dec, 27 2019 TIME: 09:13 pm



- ### SHEET NOTES
1. SITE IS IN USDA PLANT HARDINESS ZONE 5B.
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 5. SEE CE101-CE501 FOR EROSION CONTROL.

- ### LEGEND
- EXISTING TREES
 - EXISTING TREE LINE / WOODLAND EDGE
 - DECIDUOUS SHADE TREE
 - ORNAMENTAL TREE
 - DECIDUOUS & CONIFEROUS SHRUB
 - LAWN SEED MIX
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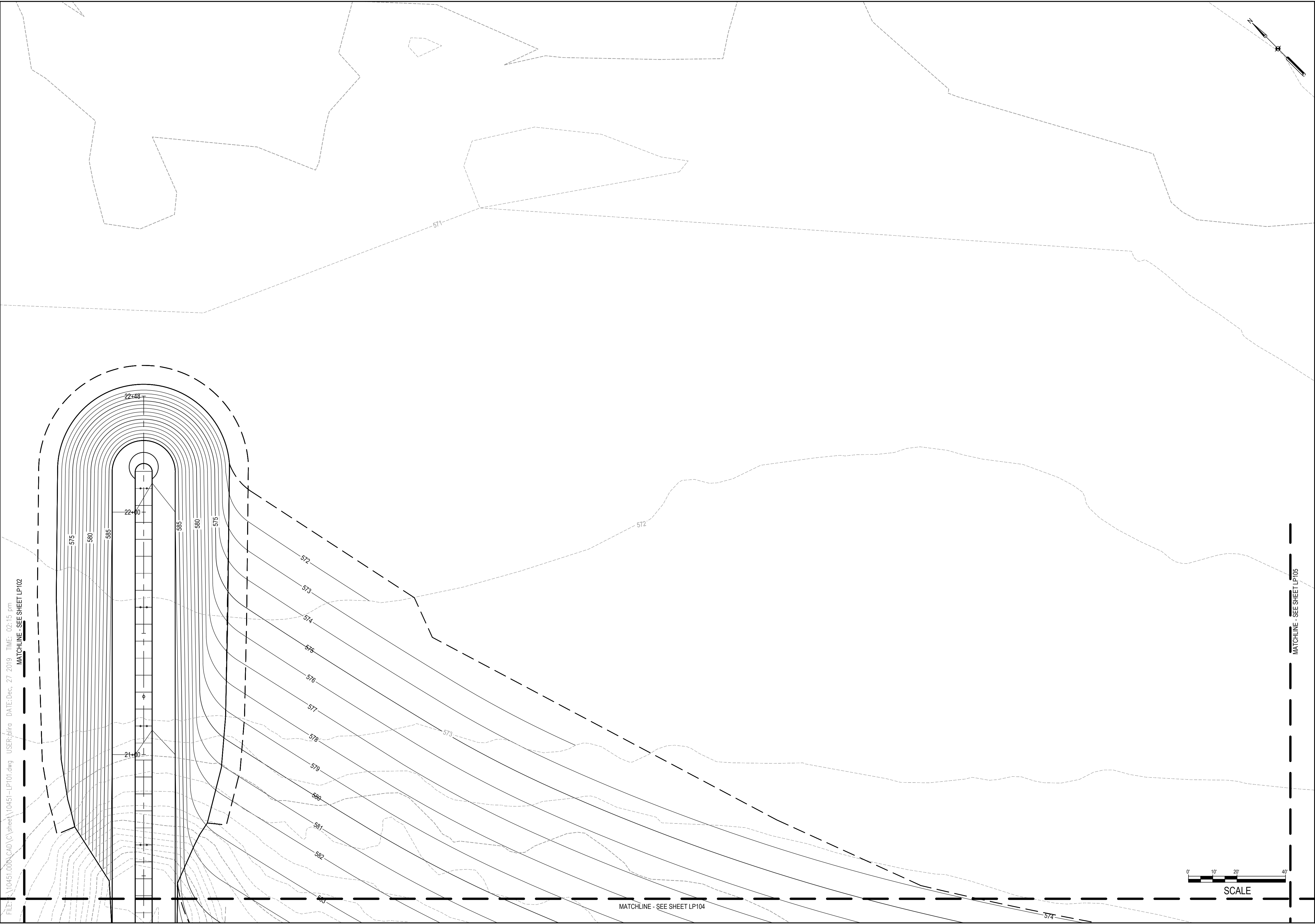
SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

SMITHGROUP

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SUITE 500
MADISON, WI 53703
608.251.1177
www.smithgroup.com

PLANTING PLAN - AREA B



FILE: \\10451.000\CAD\C\sheet\10451-LP101.dwg USER: jira DATE: Dec, 27 2019 TIME: 02:15 pm
MATCHLINE - SEE SHEET LP102

MATCHLINE - SEE SHEET LP104

0' 10' 20' 40'
SCALE

SHEET NOTES

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SEALS AND SIGNATURES

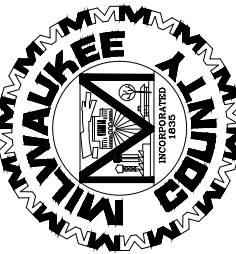
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PLANTING PLAN - AREA C

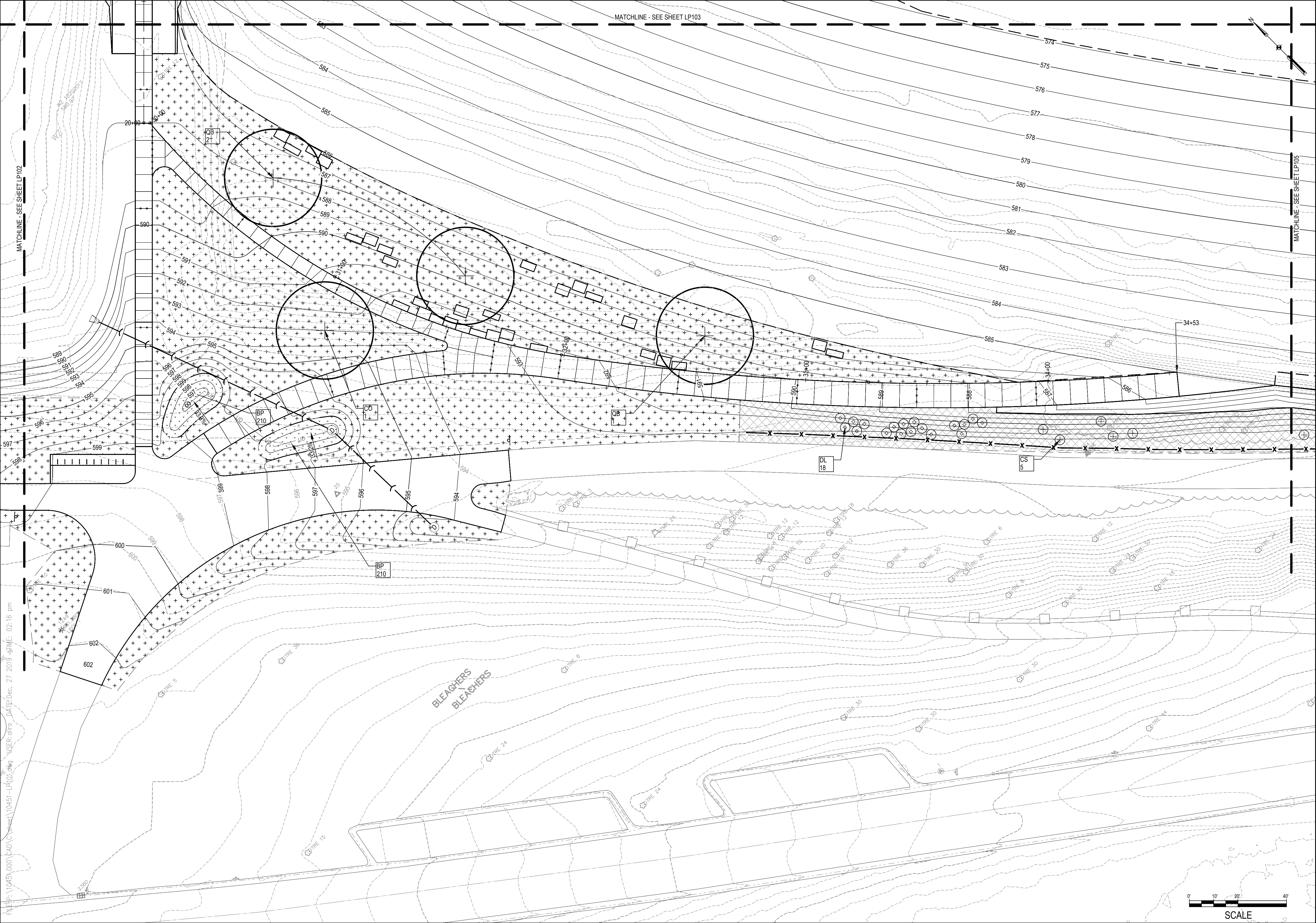
BEACH IMPROVEMENTS
MKE CO SOUTH SHORE PARK
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Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

DATE:
12/13/2019
PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

LP103



SHEET NOTES

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SEALS AND SIGNATURES

NOT FOR CONSTRUCTION

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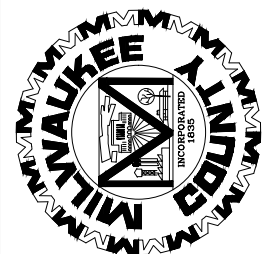
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www.smithgroup.com

PLANTING PLAN - AREA D

LP104

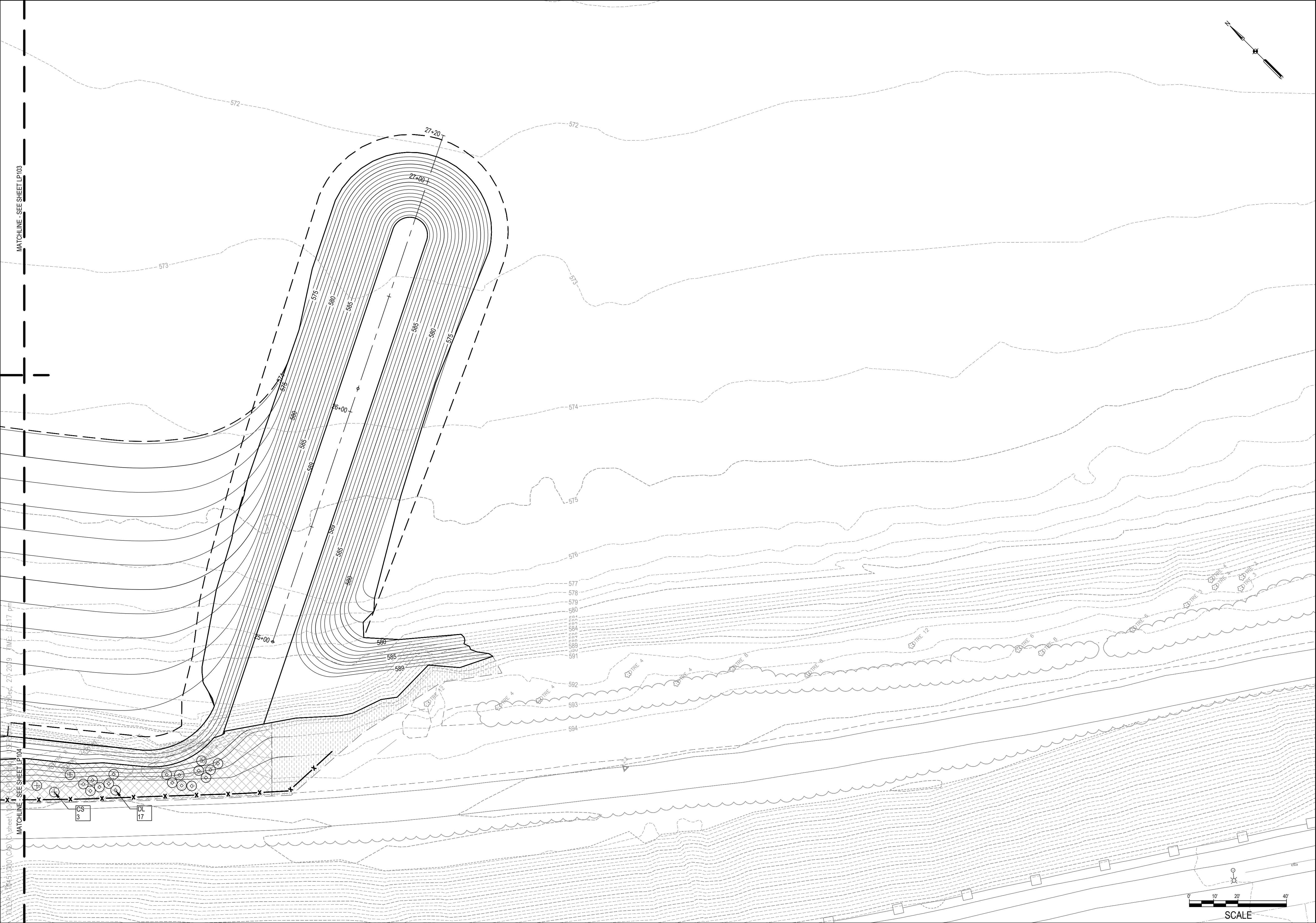
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Architectural, Engineering & Environmental Services
633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

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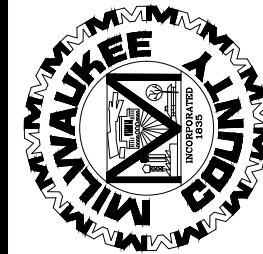
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PLANTING PLAN - AREA E

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Milwaukee County Dept. of Administrative Services
FACILITIES MANAGEMENT DIVISION
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633 WEST WISCONSIN AVENUE, SUITE 1000 MILWAUKEE, WI 53203

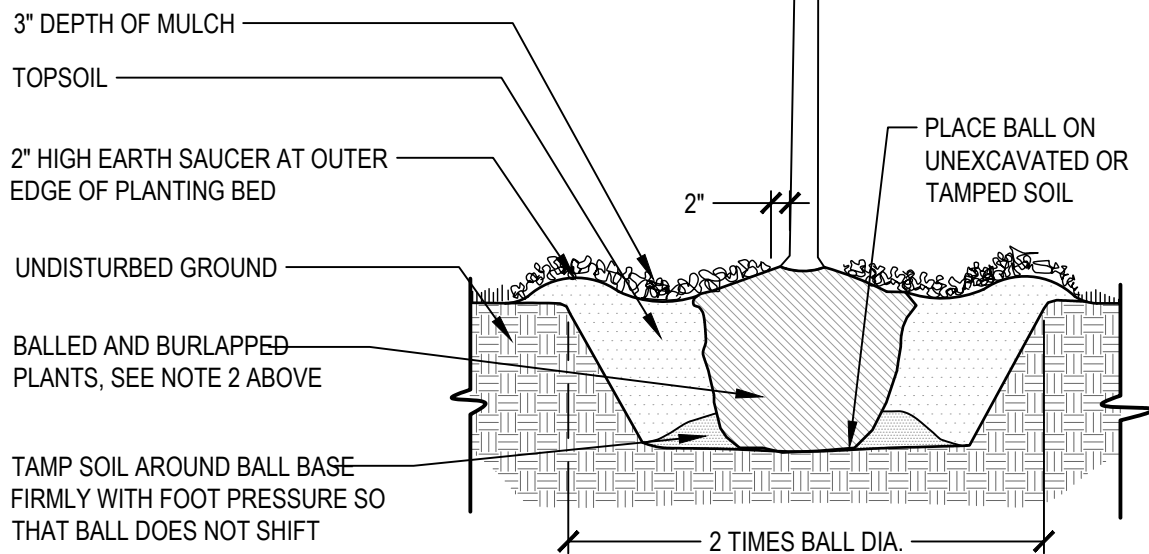
DATE:
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PROJECT:
P560-17630
SITE NO:
639
BUILDING NO:

LP105

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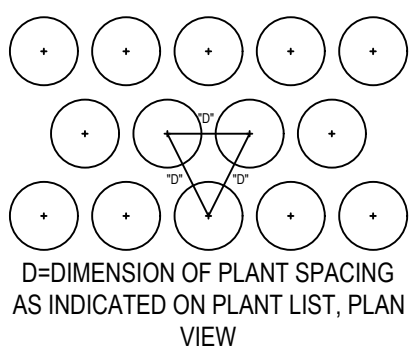
1. PLANT EACH TREE SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET AND REMOVE COMPLETELY FROM ROOT BALL. REMOVE TWINE, ROPE, AND BURLAP ENTIRELY FROM ROOT BALL.
3. DO NOT PLACE MULCH IN CONTACT WITH TRUNK.
4. PRUNE ONLY TO REMOVE DEAD OR BROKEN BRANCHES.



1 DECIDUOUS TREE PLANTING

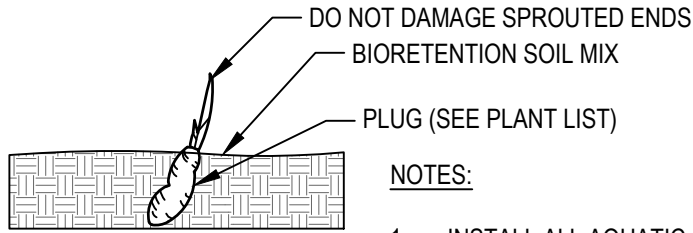
SCALE: 1/2" = 1'-0"

LABEL	SCIENTIFIC NAME	COMMON NAME	QTY.	COND.	SIZE	SPACING	COMMENTS
CANOPY TREES							
CO	Celtis occidentalis	Hackberry	1	B&B	3.5" Cal.	Space as shown	
QB	Quercus bicolor	Swamp White Oak	3	B&B	3.5" Cal.	Space as shown	
DECIDUOUS AND EVERGREEN SHRUBS							
CS	Cornus sericea	Red Osier Dogwood	29	Container	#5	Space as shown	
DL	Diervilla lonicera	Dwarf Bush Honeysuckle	35	Container	#3	Space as shown	
JC	Juniperus communis var. depressa	Oldfield Common Juniper	23	Container	#5	Space as shown	
PO	Physocarpus opulifolius	Common Ninebark	18	Container	#5	Space as shown	
VD	Viburnum dentatum	Arrowwood Viburnum	12	Container	#5	Space as shown	
BIOSWALE PLUGS							
	Anemone canadensis	Canada Anemone	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	Plugs Shall Be Planted in Groups of 20-30 Plants of the Same Species at 18" O.C. within seeded bioswale areas
	Asclepias incarnata	Swamp Milkweed	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Aster novae-angliae	New England Aster	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Aster puniceus	Bristly Aster	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Carex bebbii	Bebb's Oval Sedge	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Carex cristatella	Crested Oval Sedge	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Carex vulpinoidea	Brown Fox Sedge	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Eleocharis acicularis	Great Spike Rush	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Glyceria striata	Fowl Manna Grass	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Helenium autumnale	Sneezeweed	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Liatris pycnostachya	Blazing Star	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Panicum virgatum	Switchgrass	192	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Pycnanthemum virginianum	Mountain Mint	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Rudbeckia hirta	Black-Eyed Susan	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
	Rudbeckia subtomentosa	Brown-Eyed Susan	84	Round Tapered Plug	2" Diam. X 5" Depth	18" O.C.	
SEED							
	Lawn Seed Mix		8400 sy	N/A	N/A	See Specification	
	Bioswale Seed Mix		415 sy	N/A	N/A	See Specification	
	Native Upland Seed Mix		1500 sy	N/A	N/A	See Specification	



2 PLANTING SPACING

SCALE: NTS



NOTES:

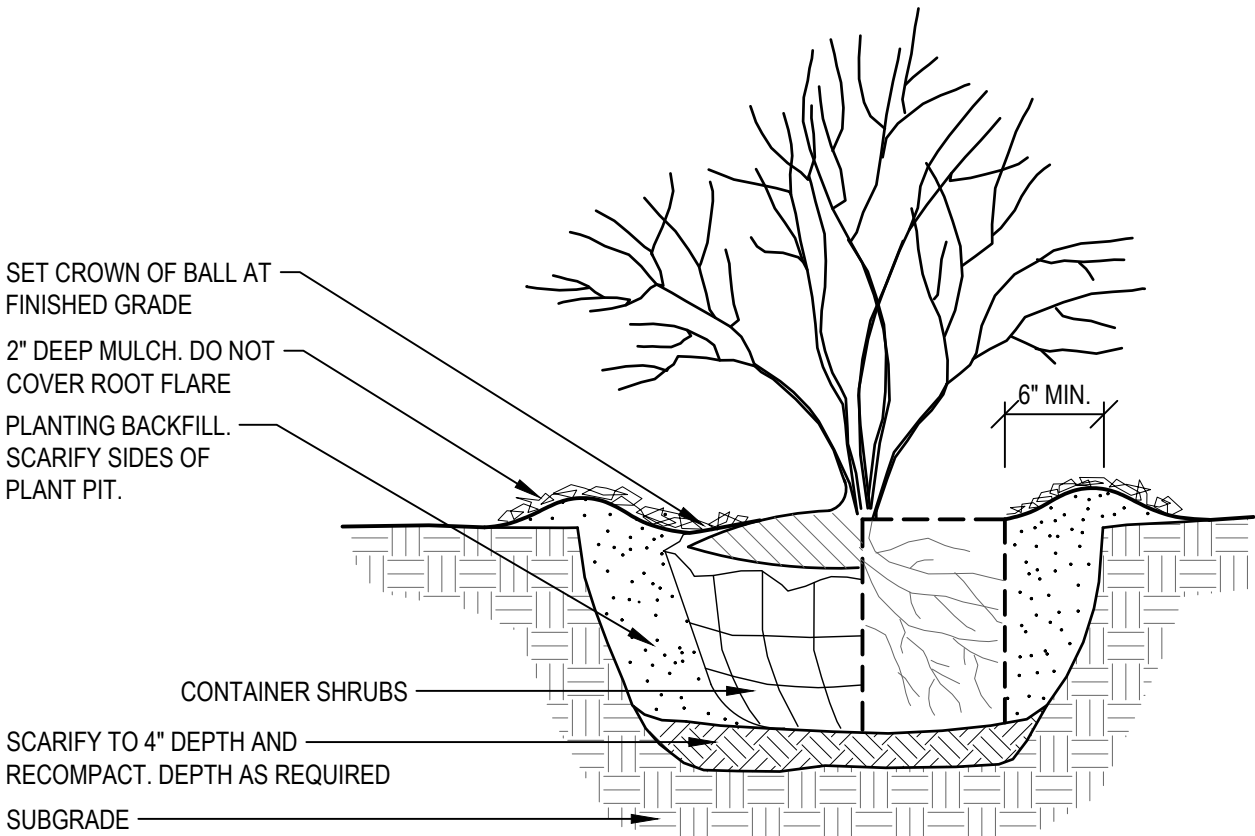
1. INSTALL ALL AQUATIC PLANTS FIRMLY INTO THE SOIL.
2. PLANT EACH PLUG INTO THE SOIL UP TO THE SHOOT COLLAR OF THE PLANT. DO NOT BURY THE ENTIRE PLANT OR DAMAGE SPROUTED VEGETATION.

3 BIOSWALE PLUG PLANTING

SCALE: NTS

NOTES:

- REMOVE POTS AND SEPARATE POT BOUND ROOTS AS SPECIFIED.
- MULCH SAUCERS SHALL BE A MIN. 3'-0" DIAMETER OR AS SHOWN ON PLANS
- DO NOT PRUNE



4 SHRUB PLANTING

SCALE: 1/2" = 1'-0"

SEALS AND SIGNATURES

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LANDSCAPE DETAILS

BEACH IMPROVEMENTS
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